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A HISTORY OF THE AKROPOLIS OF ATHENS.

[PLATES XV—XVIII.]

The basis of this "History of the Akropolis of Athens" was a paper read before the Royal Archæological Seminary of the University of Leipzig, in March, 1891. The kind words of the Director, Professor Overbeck, encouraged me to have it published. At the end of a year, during which it has lain untouched, I have taken it up again, worked the old material over and added some that is new.

I have dwelt at proportionally greater length upon the condition and development of the Akropolis before the Persian invasion and its history after the Peloponnesian War than upon the Akropolis in the times of Perikles. The earlier period seemed to me more important, because the facts concerning it are new; the later claimed more attention, because the facts are unfamiliar to the general reader. But regarding the age of Perikles, the appearance presented by the Akropolis in his day is, as Dorpfeld has said, so fully and definitely known from the buildings preserved and from extant literature, that differences of opinion concerning it are impossible except on minor points. New discoveries and more exact investigations of existing monuments can

¹ Mittheilungen Athen, XII, p. 162.

make no essential changes in the picture familiar to every one that turns these pages.

But acquaintance with the condition of the Akropolis as it was before its desolation at the hands of the Persians and its renovation by Perikles is by no means so definite or so universal. It is true, we had known from literature that the Akropolis was adorned with temples, altars, votive gifts, etc., before the Persians came, but we have not been in a position to form any adequate conception of that earlier glory before the days of Kimon and Perikles. And even the little that we once thought to be incontrovertible fact—for example, that there once stood upon the site of the present Parthenon an older Parthenon built by Peisistratos—even that has proved to be an error. Accordingly I have gone back to those older times and endeavored to present in full outlines the picture upon which so much new light has been thrown by the recent excavations.

Throughout the essay it has been my main object to follow historically the architectural development of the Akropolis. And in dealing with the Akropolis I have confined myself as nearly as possible to the upper Akropolis; and the buildings that lie upon its slopes have been drawn into the narrative only when they stood in some immediate relation to the enclosure of the Akropolis proper, and even then they have received only a passing mention. The Dionysiac Theatre, the Odeion of Regilla, the Choragic Monument of Thrasyllos, the Odeion of Perikles, the real Theseion, the Eleusinion—all these are locally connected with the Akropolis, but are nevertheless foreign to my subject, which deals only with what is enclosed by the walls about the citadel (1).

⁽¹⁾ I wish, above all things, to express my indebtedness to Dr. Dörpfeld, Director of the German Archæological Institute in Athens, for his kindness in permitting me to use both his private letters to me and his published articles in the Mittheilungen des Instituts. Next to Dr. Dörpfeld I have received most help from Michaelis' exhaustive work on the Parthenon, and from Wachsmuth's Die Stadt Athen im Allerthum. Two books, Harrison and Verrall, Mythology and Monuments of Ancient Athens, and Hertzberg, Athen, I wish to say in advance, were unknown to me, except by name, until after my essay was entirely completed. If, therefore, similarities should be found between parts of my narrative and their's, it will be due, except where they are expressly quoted, to our having drawn from common sources, in the former instance, Dr. Dörpfeld; in the latter, Michaelis and Wachsmuth.

I.-THE FORM OF THE AKROPOLIS.

In the southern part of the precincts of ancient Athens there once rose up from the plain a rugged, chasm-torn rock—the last spur but one of the chain of hills that runs from Pentelikon to the southern coast of Attika. Its highest point was but 156.2 metres above the level of the sea, and less than 100 metres higher than the plain on which it stood. On the west side only did it offer a comparatively easy ascent. Everywhere else it fell precipitously to the plain with declivities more or less inaccessible. Of all the many hills that lay in and around Athens this was the only one with much of a surface on its summit, presenting as it did an area of 270 by 135 metres. Thus in its entire formation this rock seemed by nature designed for a fastness, and this destiny it fulfilled in becoming the most glorious fortress the world has ever seen—the Akropolis of Athens.

But the top of this hill was not always the smooth plateau that we now find it, but, as the excavations lately completed prove, everywhere a jagged, uneven, rocky surface, rough and rent with many fissures.

II.-THE FIRST SETTLEMENT.

Partly by hewing away the jags of rock and partly by filling up the chasms with stones and earth, the earliest inhabitants of Attika created on this uneven hilltop a number of smaller plateaus for their dwellings and sanctuaries. In a condition of society where universal warfare continually prevails, as we find it, according to Thukydides (I, 2) at the dawn of Greek history, the first settlements are necessarily made with a view to every possible advantage afforded by natural protection. They sought, not the highest hill, but the one that offered the broadest surface on its summit and had the steepest sides. Accordingly we should look to the Akropolis for the earliest inhabitants of the land. And here, in truth, they were; and the first settlement on the sacred rock of Athens dates back, as relics of the Stone Age found upon the Akropolis unquestionably prove, to an inconceivably remote period. We

² ULRICH KÖHLER, in Hermes, VI, p. 105.

learn further from Thukydides³ and the common use of the word $\pi \delta \lambda \iota s$ (city) elsewhere⁴—especially in Attic inscriptions⁵ that the citadel originally was "the city," since by this word in its limited sense the Akropolis itself is officially designated. And before there was a "lower city," there was no occasion for the word ' $\lambda \kappa \rho \delta \pi o \lambda \iota s$ to distinguish an "upper" from a "lower town."

III .- Πυκινός δόμος Έρεχθήσς. THE GOODLY HOUSE OF ERECHTHEUS.

But we need not confine ourselves to the evidence furnished by literature, for the spade has not long since settled the question beyond a peradventure. On the north side of the Akropolis about the Erechtheion (see plan of the Akropolis, Plate xv) are now plainly to be seen the heavy foundation walls of a great royal palace. A number of apartments stretching one after the other from east to west may be distinguished, but just how far toward the south and west this palace extended cannot be determined, as the foundation walls in those directions were even in antiquity too far demolished. But as far as the outlines can be made out, the building that stood here corresponded exactly in material, in construction and in general arrangement with the similar royal residences in Tiryns, Mykenai and Ilion; and by analogy with these we may very justly infer that in Athens also a large part of the citadel was taken up by the palace of the ruling Prince.

Behind the palace, that is at its northeast corner, (AB, on PL. xv) a narrow stairway leads from the royal house down through a cleft in the rock artificially widened to receive it, under the present wall of the Akropolis and almost straight toward the quarter

⁴ Cf. PAUS. I, 26, 6: ἐν τῷ νῦν ᾿Ακροπόλει, τότε δὲ ὀνομαζομένη πόλει.

 $^{^6}$ E. g. CIA. I 32 B, 4 and 10. 58, 11; II 11, 26; 20, 2; 42, 7; 45, 5; 85, 13; etc. After the middle of the first century B. C. this use of $\pi\delta\lambda s$ in inscriptions ceases.

called $\kappa \hat{\eta} \pi o i$ —" the gardens;"—this little rear gateway may also, like the similar ones in Mykenai and Tiryns, have served for fetching water in time of need. It was, of course, entirely covered up in the fifth century by the building of the north wall of the Akropolis—the so-called wall of Themistokles. This little stairway, hewn in part out of the live rock, is scarcely at all different in its general plan and style of construction from that in Tiryns. The ancient palace on the Athenian Akropolis had, like the royal palaces at Tiryns and Mykenai, besides the main entrance in the west, a second approach from the side directly opposite. This second approach was, in each and every case, a narrow flight of steps, built in a half-hidden, secluded corner and in a steep place, accessible to foot-passengers only.

Furthermore, in the great court, which we find west of the Erechtheion (the place marked Pandroseion, on Pl. xv), near the spot where that primeval, crooked, gnarly, old olive tree of Athena stood, was the altar of Zeus Herkeios6—the hearth and center of the state-at which the king, as the head of his tribe and father of the whole people, was wont to sacrifice. In the houses, the foundations of which we observe west of the Erechtheion (the walls colored green in our plan), we may perhaps recognize the habitations of the king's retainers, who must have dwelt in the closest proximity to their prince's palace. The altar of Zeus Polieus, too, erected by the first king, Kekrops, must have stood close by. Athena also had a sanctuary within the palace; and the theory has more than once been urged that it was the "old temple of Athena," discovered by Dörpfeld in 1885 (see Pl. xv), with which we shall have to deal later on, that stood within the gates of this ancient palace.7 This hypothesis is based on two passages from Homer: the one where Athena, after accompanying Odysseus to the house of Alkinoös, left him at the doors and "came to Marathon and to wide-wayed Athens and entered the goodly house of Erechtheus." The πυκινὸς δόμος ("goodly house") is, as the words signify, not the Hekatompedon (the old temple between

⁶ PHILOCH., ap. DION. HAL., § 18 (frag. 146).

 $^{^7}$ Lolling, Τδ Έκατόμπεδον ('Αθηνᾶ, 1890, reprint p. 17, note 1); Dörffeld, Mitth. Athen, XII. p. 26.

 $^{^{8}}$ Od. $_{
m VII}$, 80-81: Ικετο δ' έτ Μαραθώνα καὶ εὐρυάγυιαν 'Αθήνην, δύνε δ' 'Ερεχθήσς πυκινὸν δόμον κ. τ . λ .

the Erechtheion and the Parthenon), nor yet necessarily the common temple of Athena and Erechtheus, but the Erechtheid palace, and by implication that part of the Erechtheid palace occupied by the shrine of Athena. For, in the first place, δόμος in Homer never means "temple" unless accompanied by the adjective lepos (sacred); and in the second place, πυκινὸς δόμος (goodly house) is Homer's standing epithet for royal palaces.9 But it is obvious that Athena came to Athens and entered the "goodly house of Erechtheus" for no other reason than that she had a sanctuary located within its gates and forming a part of it. But it is going too far to conclude from the passage quoted that her sanctuary occupied the same spot as either the Hekatompedon or the shrine of Athena in the Erechtheion. From this passage of the Odyssev, then, we learn only that Athena had a sanctuary within the royal palace on the Akropolis. The other passage from Homer, however, gives us more definite knowledge: "And they dwelt at Athens, a well-built town, the realm of the noble Erechtheus, whom once Athena, daughter of Zeus, reared up ... and gave a place in her own rich temple at Athens." 10 Now, although the poet in the first-quoted passage is evidently acquainted with the royal palace of the Erechtheids on the Akropolis, as even Aischylos " also is, in this second passage no "temple" can possibly be meant other than the complex sanctuary of Poseidon, Athena, and her foster son, Erechtheus, which was later called the Erechtheion, by way of distinguishing it from the other temple or temples of Athena Polias. She gives him a place in her own rich temple, that is, both are wershipped under one common roof; the conclusion is inevitable.

Near this most ancient sanctuary of Athena, the protecting goddess of the city, was the grave and heroon of Kekrops, the earthborn father of the Athenian people, and, in the popular tradition,

⁹ Cf. also Od. vi, 134; Il. x, 267; xix, 335; etc.

¹⁰ Hm., Il. 11, 546-549: οὶ δ' ἀρ' 'Αθήνας εἶχον, ἐνκτίμενον πτολίεθρον, δήμον 'Ερεχθήος μεγαλήτορος, ὅν ποτ' 'Αθήνη θρέψε, Διός θυγάτηρ..... κάδ δ' ἐν 'Αθήνης εἶσεν ἐῷ ἐνὶ πίονι νηῷ.

¹¹ Aisch., Ευπ. 855: καὶ σὸ (the Eumenides) τιμίαν ἔδραν ἔχουσα πρὸς δόμοις Ἐρεχθέως.

their first king, after whom the city—that is, the Akropolis—was called "Kekropia." 12 As in the case of all cultus heroes, the worship of Kekrops centered at his tomb; his worship, furthermore, was intimately connected with that of Zeus Herkeios and that of Athena Polias.13 As father of the race of the Kekropidai and king of Kekropia, he represents a definite epoch in Athenian story, an epoch older than that of the "Ionic" Erechtheus, with whose rise, furthered as it was by the Ionic epos, his former importance is lost. Erechtheus dwells as μύχιος (indweller) or as. όφις οἰκουρός (the serpent keeping watch over her house) in the holy of holies of Athena's temple.14 But Kekrops, who had been to Attika all that Erechtheus was and more, is set aside with a little space at the corner of that same temple and outside of it. Some interpreters, grossly perverting the words of Clemens Alexandrinus, 13 have forced Kekrops also into her temple. Clemens does says indeed that in the temple of Athena at Larisa there was the tomb of Akrisios, but of Kekrops he asserts no more than that Antiochos says that "upon the Akropolis of Athens is the tomb of Kekrops," while he does emphatically affirm of Erichthonios that he was buried in the temple of the Polias. 16 Theodoretos, 17 borrowing from the same source, adds that the tomb is παρὰ τὴν πολιοῦχον αὐτήν [beside (the temple of) the Polias herself]; while Arnobius,18 copying from Clemens and carelessly confusing the two statements of the latter, makes him say that Athenis in Minervio Cecropem esse mandatum terræ (that Kekrops was buried in the temple of Athena at Athena). The blunder is

¹² PLIN., N. H. VII, 56, 194: oppidum Cecrops a se appellavit Cecropiam, quae nunc est arx Athenis; and Etym. Magn., p. 352, 54, s. v. ἐπακρία χῶρα. Moreover the name Kekropia is occasionally applied to the whole Attic land as well, which before had been called Akte; cf. APOLLOD. III, 14, 1; Mar. Par. 1, 3.

¹³ PAUS. VIII, 2, 3; EUSEB., Praep. ev. X, 9, 22; id., Chron. II, 24. 27.

¹⁴ Cf. IMMISCH, in ROSCHER'S Mythol. Lex. 11, p. 1023.

 $^{^{15}}$ Protrept. III, 45: ἐν τῷ νεῷ τῆς ᾿Αθηνᾶς ἐν Λαρίση ἐν τῆ ἀκροπόλει τάφος ἐστίν ᾿Ακρισίου, ᾿Αθήνησι δὲ ἐν τῷ ᾿Ακροπόλει Κέκροπος, ὤς φησιν ᾿Αντίοχος κ. τ. λ.

 $^{^{16}}$ l. c. : τί δὲ 'Εριχθόνιος; οὐχὶ ἐν τῷ νεῷ τῆς Πολιάδος κικήδευται; Cf. Apollod. 111, 14, 7, 1: 'Εριχθονίου ταφέντος ἐν τῷ τεμένει τῆς 'Αθηνᾶς.

 $^{^{17}}$ Graec. affect. cur. VIII, 30, p. 115: Καὶ γὰρ ᾿Αθῆνησιν ώς ᾿Αντίοχος : . . . ἄνω γε ἐν τῆ ᾿Ακροπόλει Κέκροπός ἐστι τάφος παρὰ τὴν πολιοῦχον αὐτήν.

¹⁸ Adv. nat. VI, 6.

obvious. Besides, we have the best of testimony elsewhere to support the uncorrupted statement of Clemens: the inventories of the commission appointed to look into and report upon the condition of the new Erechtheion speak repeatedly of the "porch of the Korai" as being "next to the Kekropion." And there, at the southwest corner of the temple, in the remains of walls adjoining the hall of the Korai, the Kekropion is since the excavations clearly to be recognized.

With that same sanctuary of Athena Polias were closely connected the altar of Poseidon and those wonderful "signs" (μαρτύρια)—the salt spring and the sacred olive tree—witnesses of his strife with the goddess for the possession of the land. Here also Hephaistos was worshiped and here honors were paid to the serpent Erichthonios and to Pandrosos, his faithful nurse.

We must notice, however, that when we go back to Theseus and his father, Aigeus, tradition forbids us to think of them as occupying the royal residence that we have seen upon the Akropolis. One story, told by Kleidemos, makes Theseus dwell on the upper Ilissos; according to another, Aigeus has his abode not far from the Delphinion, and even in Plutarch's time the home of Aigeus was pointed out in that quarter.20 There seems, then, to be no doubt that the residence of Aigeus and his son, who are foreign immigrants, and have, as Plutarch distinctly states, 21 no connection whatever with the Erechtheids, was outside the city and that until after the "synoikismos" of Theseus they remained in some way entirely apart from the community that occupied the citadel. But from this time on we again find the Akropolis the sole seat of royalty. Here dwelt the ruler of the land surrounded by his retainers, his assistants in the government and the priesthood; here the chiefs of the people met at court, like the Trojans at the gate of Priam, to take counsel with the king; and here we find the germs of the race that prided itself on being descended from mother earth herself.22

¹⁹ CIA. 1, 322, col. 1, 9. 56. 62. 83.

²⁰ PLUT., Thes. 12.

n Ibid. 13.

²¹ THUK. 1, 2; SOPH., Aj. 102.

It was by no mere chance, as we have already seen, that this hill was chosen as the original site for this favorite city of the ancient world. Not only as a fortress but as a dwelling place as well it was abundantly blessed by nature: in the hottest summer days it is fanned by a cool breeze from the sea, while the city and fields below are parched with heat and choked with clouds of dust. The seat of government, however, and the residence of the community were afterward removed from the Akropolis to other quarters, and the gods remained henceforth in sole possession of the "sacred rock."

IV.-THE FIRST FORTIFICATIONS.

Thus, in early times the Akropolis was not only the site of the oldest national sanctuaries but also the scene of public life and the seat and centre of the governing power. It was the "mighty tower" of Athens, but to have been such, it must have been defensible; and so it was. Indeed, it can no longer be seriously questioned that down to the time of Themistokles the city possessed no other fortifications whatever besides those about the Akropolis. When these fortifications were built we cannot tell, but they date far back into prehistoric times. Their construction, as well as that partial leveling of the surface of the Akropolis already mentioned, has been ascribed to the Pelasgians²³—a people shrouded in mystery—who, as foreign wage-workers, are said to have built the fortifications for the natives of the land. It is often said that a Pelasgian colony settled upon the Akropolis, but this is a confusion of story; for, according to every tradition, the Pelasgians are foreigners who have their home for the time on Mount Hymettos (or at the foot of the Akropolis) and are always quarreling with the inhabitants of the sacred hill. Still there is coupled with the name Pelasgians no definite notion of any particular tribe; they are, as Wilamowitz-Möllendorf²⁴ pertinently remarks, imported only to be expelled by the Ionians.

²⁸ Hdt. VI, 187; Myrsilos, ap. Dion. Hal. Antiq. I, 28; Phot., s. v. Πελαργικόν; Kleidemos, frag. 22 (Bekker, Anecdota, p. 419, 27); Suid. s. v. ἀπεδα and ἡπέδιζον.

²⁴ Aus Kydathen, p. 144.

The name of this ancient stronghold is written in the one official inscription that we possess Πελαργικόν—and it is there three times repeated with that spelling. Thukydides (II, 17) uses the word twice and the best manuscript (Laur. C) has Πελαργικόν both times; the same form is found also in Aristophanes,26 Kleidemos,27 Dionysios of Halikarnassos, 28 Photios, 29 and elsewhere. 30 Correctly speaking, therefore, Pelargikon and not Pelasgikon is the name that was given to that earliest settlement; but why it was called Πελαργικόν (Stork-nest (?) or Stork-town (?)) is a matter for speculation. At all events, the word Πελαργικόν has no connection whatever with Πελασγοί but, as there always were Pelasgi in Attika,31 the similarity between the words led easily to their confusion and to the slight change of name that resulted; and then, with stories invented to fit the case, people began to trace the work of fortification back to the Pelasgians, while the walls were styled "Pelasgic." Pausanias (1, 28, 3.) and Pliny (vII, 194.) even go so far as to name the architects-Agrolas (the rough stone) and Hyperbios (the man of giant strength.) They were said to have come from Sicily, the land of the Homeric Kyklopes whom Euripides (Kykl. 239) calls the "movers of rocks" and "builders of gates."

Upon hardly any other subject in the whole range of Athenian topography has so much been written, or so little that will stand the test of even the most superficial criticism, as upon the Pelargikon. It is not my purpose here to confute any or all the old views in regard to the Pelargikon or to propose any new mere theory of my own, but from the actual remains, with the help of our ancient authors, to reconstruct as far as possible the original fortifications of the Akropolis. Accordingly, we will begin not with a theory, as others have done, but with the remains that are still preserved; and here we may distinguish two parts of the Pelargikon, an upper and a lower.

²⁵ CIA, 1v, 2, 27b.

²⁶ Lys. 1153, and Schol. R., 1. c.; Av. 832 and Schol. RV 832 and 836.

²⁷ Frag. 22 (BEKKER, Anecdota, p. 419, 27.)

²⁸ Antiq. 1, 28.

^{29 8.} v.

³⁰ Cf. JAHN-MICHAELIS, Paus. Descr. Arcis Athenar. 1, 28, 3,

³¹ WACHSMUTH, University lectures, 1890.

³² Cf., e. g., HDT., MYRSILOS, PHOT., 1. c.

(1) The upper part.—In the recent excavations traces, at least, of a wall surrounding the Akropolis were found on the east end and along almost the whole length of the south side (see PL, xv.) On the north side, however, but few remains of the "Cyclopean" wall are found. Nevertheless it need not in the least be supposed that the Akropolis was walled up only in places, for the remains of walls are found in the most inaccessible parts of the south and east sides, as well as in the parts by nature left the most defenseless. We must rather conclude that in its whole periphery the Akropolis was surrounded with a wall.³³ Remains of this old wall have been preserved there only where the new wall lies outside of the old. On the north the new wall follows exactly the line of the old one, and in every quarter wherever the line of Kimon's wall coincides with that of the old wall or lies within it, the old one had to give way and was entirely obliterated. The fragments of the wall that yet remain follow closely the natural lines of the formation of the rock and are everywhere built at the outermost edge of its upper surface.

Now, in order to obtain the complete picture suggested by the scanty remains along the north side, let us summon to our aid the Greek authors. Hekataios ³⁴ says: τὸ τεῖχος τὸ περὶ τὴν 'Ακρόπολιν 'εληλαμένον (the wall, built around the Akropolis). Myrsilos ³⁵ remarks: καὶ (οἱ Πελασγοὶ) τὸ τεῖχος τὸ περὶ τὴν 'Ακρόπολιν τὸ Πελαργικὸν περιέβαλον (and they, i. e., the Pelasgians) constructed the Pelargikon round about the Akropolis); and Kleidemos ³⁶ also uses the word περιβάλλειν (to surround) and περίβολος (circumference) in speaking of the building of the wall around the Akropolis. Such expressions as these can be applied only to something encircling the entire citadel, as even Wachsmuth, ³⁷ since the excavations, is willing to grant. Furthermore, the fact that the Persians clambered up on the north side and got

³³ After the above was written it was very gratifying to have Dr. Dörpfeld write that he fully agreed with me in this conclusion.

³⁴ Ар. Нот. VI, 137.

²⁵ Ap. DION. HAL. Antiq. 1, 28.

³⁶ Frag. 22 (BEKKER, Anecd. p. 419, 27.)

⁸⁷ University lectures, Leipzig, 1890. For his earnest defense of the other view see his Stadt Athen, I, p. 292.

possession of the fortress proves nothing, for as Herodotos (VIII, 53) tells the story they climbed up κατὰ τὸ ίρὸν τῆς Κέκροπος θυγατρὸς 'Αγλαύρου (by the sanctuary of Aglauros, the daughter of Kekrops) which was ὅπισθεν τῶν πυλέων behind, that is, (beyond, outside the gates, for Herodotos is speaking from the point of view of the Persians), and of course the Athenians always had free communication between the Akropolis and the Aglaurion through this same cleft in the rock. But certainly this passage way was not open to the general public-hence the surprise of the Athenians that the Persians should come up that wayand it should be remembered in passing that the stone staircase in this cleft as at present existing (PL, xv, CD) was not built until after the Persian wars. Again, from the words of Pausanias, (1, 22, 4) when he says ές δε την Ακροπολιν έστιν είσοδος μία, ετέραν δὲ οὐκ ἔχεται, πᾶσα ἀπότομος οὖσα (there is one entrance to the Akropolis and it has no other, for it is precipitous on every side), it cannot by any means be inferred that no wall was needed in prehistoric times and that therefore none existed; for in his day there certainly was one, and the ἀπότομος (precipitous) has reference of course to the condition of the Akropolis as he saw it, with Kimon's wall encircling it entirely round about.

Still, this great Pelasgic wall was not the only means of strengthening the citadel of Athens. The same art that availed to cut down in such a manner the rock of the Pnyx, on either side of the so-called Bema, was doubtless brought into requisition here to make the naturally precipitous rock of the hill even steeper.³⁵ This is, for example, obviously the case on the south side above the Asklepieion.

2) The lower part.—Besides the wall encircling the Akropolis above, there was also the lower or main part of the "Pelasgic" fortifications—the tremendous outworks at the west end, which are usually called the Pelargikon par excellence. Just what appearance these outworks presented we can never know; but so much is certain: they were a gigantic system of fortifications, with nine gates, which led by several to terraces supported by

³⁸ Cf. WELCKER, Felsaltar des höchsten Zeus, p. 313.

³⁹ ΚLΕΙDEMOS: περιέβαλλον ἐννεάπυλον Πελαργικόν (frag. 22). POLEMON, Frag. 49: ἐκτὸς τῶν ἐννέα πυλῶν.

⁴⁰ Just how many we cannot say.

the mighty walls, one above the other, gradually up to the citadel.

How much of this, now, is still preserved? The lowest wall of the Pelargikon was that whose position was afterwards occupied by the southernmost wall of the Asklepieion (see fig. 1, p. 489) and by this means in part preserved. This wall, along with the prehistoric road that lies immediately below it and conducts through the theatre of Dionysos and then leads, outside the wall as a matter of course, up to the citadel—this wall, with the road, is continued along from the Asklepieion at the same elevation until interrupted by the Odeion of Herodes Attikos. After the latter was built, the road was altered so as to run not only up behind it but down the slope again on the opposite—that is, on the west side of the cavea. This can still be traced. Before the erection of the Odeion then, we may conclude, both wall and road passed directly through the site now occupied by Herodes' theatre, and continued together (fig. 1) up to the Areiopagos; while the wall itself, without the road, extended on a little beyond Pan's Grotto and there rejoins the natural rock of the Akropolis, just as at the other end. The gate of this wall must have been situated directly opposite the Areiopagos (fig. 1), for first the Amazons, as the story goes, and then the Persians made this hill the base of their operations against the Akropolis.4 And in addition to the inference that is so easily drawn from the operations of the Amazons and Persians, Polemon 42 seems to state distinctly that such was the case, when he says that "the heroon of Hesychos is situated close to the Kyloneion (that is, by the grotto of the Eumenides on the northeast corner of the Areiopagos, facing the Akropolis) just outside the nine gates." The first or outermost gate, therefore, must have been directly opposite the Areiopagos (fig. 1).

Now let us return again to the south side. Between the Odeion and the Asklepieion we find preserved (fig. 1) a small part of the second terrace wall, which first projects at almost a right angle from the rock of the Akropolis, then bends around, and extends on, nearly parallel to the first wall. This is the second circuit wall

⁴¹ HDT. VIII, 52; PAUS. I, 18, 2.

⁴² Frag. 49 (Schol. to SOPH. Oid. Kol. 489).

of the Pelargikon. But, be it noted, while the first was "Cyclopean," this, like the next to be mentioned, is "polygonal," and, therefore, either repaired later or altogether of later construction.

Somewhat higher, but still outside Beulé's gate, there were certainly other such terraces, as every one that has ever climbed the hill, or even studied von der Launitz's model of the Akropolis, will not have failed to observe. Excavations will soon decide whether or not the remains of Pelasgic walls are hidden there.

The other polygonal wall, above referred to, the one lying in the axis of the Propylaia (fig. 1, fourth terrace, see Plate XV, between Beulé's gate and the Propylaia), although it has often been called "Pelasgic," is not so old, but probably belongs to the VI century B.C., and is perhaps a part of the new plan of fortification executed by Peisistratos, in order to make the old Pelasgic fortress quite impregnable. Whether it actually took the place of one of the old Pelasgic terrace-walls we can no longer say with positive certainty.

But now again we come to another portion of the genuine έννεάπυλον Πέλαργικόν (the nine-gated Pelargikon), the Pelasgic wall that is now for the most part hidden by the Nike bastion (PL. xv and fig. 1). Here would come the last great struggle on the part of the defenders to protect their stronghold, and on the site of the Nike bastion we have still the remains of a mighty fort, an older "pyrgos," flanking for a considerable distance at close range the unprotected right side of the attacking foe. That taken, but one more wall was left to storm—the highest and last, and the best preserved portion of this great fortress. This was at once the boundary wall of the sanctuary of Artemis Brauronia and also a part of the surrounding wall of the upper citadel. It is an exceedingly massive wall, six metres thick, and as Akropolis wall it needed to be stronger at this point than elsewhere, for everywhere else on account of the steepness of the cliffs the wall was only with the greatest difficulty approachable by the enemy.

Thus we have found as lower Pelargikon a system of nine great redoubts rising one behind the other.

And now we are met by the further question: how far did the Pelargikon extend? That it was by no means small we know from the passage in Thukydides (II, 17), in which is narrated how

upon the invasion of Attika the people, in their extremity, crowded into the city, and filling up every available spot took up their abode even in the Pelargikon, in spite of the fact that the place was laden with a curse. 43 The same incontrovertible evidence is afforded by the Eleusinian inscription already mentioned, for the decree therein preserved forbids the quarrying of stone within the Pelargikon and also the carting away of earth from the same.44 But from three passages of Lucian we have more exact information: (1) Pisc. 42, where the philosophers throng up to the citadel. The description of the localities is exact and systematic; the wise men completely fill the avodos (that is, the western slopes of the Akropolis); and then this specification follows: in the middle, the Pelargikon; to the right of it, the Asklepieion, and to the left the Areiopagos; again, to the right of the Asklepieion the grave of Talos, and again to the left of the Areiopagos the Anakeion. Thus:

5) Anakeion

3) Areiopagos

1) Pelargikon Akropolis

2) Asklepieion

4) Grave of Talos

From this it is clear that the Pelargikon reached at least from the Asklepicion to the Areiopagos. In complete accordance with this conclusion might be adduced as still further evidence, if more were needed, the entire absence of all ancient buildings on the terrace between the Asklepicion and the Odeion of Herodes; for it was forbidden to build anywhere within the walls of the Pelargikon, the oracle declaring τὸ Πελαργικὸν ἀργὸν ἄμεινον (that it was better, safer, that the Pelargikon should be bare).

But did it extend no further on the north beyond the Areiopagos? From the second passage in Lucian (Pisc. 47), where the philosopher-fisher seating himself ἐπὶ τὸ ἄκρον τοῦ τειχίον (that is, "upon the corner of the wall," of the Akropolis of course, next to

⁴³ ΤΗυΚ., ΙΙ, 17: τό τε Πέλαργικόν δ και έπάρατόν τε ήν μη οίκειν.

[&]quot;This prohibition is recorded by POLLUX (VIII, 101) also, who adds that in case of violation the fine was three drachmae and "costs."

⁴⁵ Cf. THUK., 11, 17.

the Pinakotheke), and dropping down his hook, baited with figs and gold, is asked whether he is going to fish up stones out of the Pelargikon—from this passage we discover that the Pelargikon extended at least as far as the north side of the Pinakotheke. Finally, according to the third passage (Bis acc. 9), Pan's dwellingplace is μικρον ὑπὲρ τοῦ Πελασγικοῦ (a little above the Pelargikon). And thus we have its extent pretty accurately defined—from the Asklepieion on the south to Pan's Grotto on the north; for the Aglaurion, according to Herodotos (VIII, 52) was not included, but lay behind—that is, outside—the walls. These limits furthermore would be in complete accord with the defensive purpose of the walls; for in this way the two best springs of the neighborhood, the Klepsydra, accessible from the summit by its Cyclopean stair-way of fifty-two steps which is still preserved, and the spring at the Asklepieion (see fig. 1) lay within the fortifications—no small advantage in time of siege. The lower Pelargikon was, therefore, identical with that part of the pre-Thesean city which was τὸ ὑπὸ τὴν ᾿Ακρόπολιν τὴν νῦν οὖσαν πρὸς νότον μάλιστα τετραμμένον (the part below what is now the Akropolis and facing the south).46

In the time before the Persian wars, then, the Pelargikon consisted of two parts, and the name Pelargikon was applied to the whole Akropolis—that is, to the whole upper citadel and the fortifications on the west and south. This, moreover, follows conclusively from the statements of Herodotos, Aristotle And the Marmor Parium, All three of which authorities testify that Kleomenes compelled the tyrants (meaning Hippias) to vacate τὸ Πελασγικὸν τεῖχος (the Pelasgic wall) within which, that is, within the walls of the Akropolis, he had been besieging them. But from the v century on, after Kimon's wall had supplaced the corresponding part of the Pelasgic walls, only the lower portion in its mighty ruins was understood by the name Pelargikon. For then the Akropolis, still in all official documents called "the city" (ἡ πόλις), consisted of these two parts: 1) the upper Akropolis,

⁴⁶ THUK., II, 15.

⁴⁷ v, 64: Κλεομένης δέ ἐπολιόρκεε τοὺς τυράννους ἀπεργμένους ἐν τῷ Πελασγικῷ τείχεϊ.

⁴⁸ Frag. 357 (Schol. R AR. Lys. 1153): Κλεομένης ... τὸν Ἱππίαν συνέκλεισεν εἰς τὸ Πελαργικὸν τεῖχος, ἔως οἱ παίδες τῶν τυράννων ἐξιόντες ἐάλωσαν.

⁶⁰ CIG. 2374 (ορ. 45): [οl] 'Αθηναΐοι ['εξανέστ]ησαν τοὺς Πεισιστρατίδας ἐκ [τοῦ Πε]λασ[γικ]οῦ τείχους.

the sacred enclosure (ἰερὸν τέμενος) of Athena Polias, and 2) the lower Pelargikon—also called Kranaa. Otherwise the following passages from Aristophanes, rendered so clear in the light of this explanation, must remain unintelligible: 1) Lys. 480: "Why have the women taken possession of the citadel and why of the Pelargikon?" And likewise 2) Birds 826 (832): "Who will be the πολιοῦχος"—that is, who will have possession of the Akropolis—"and who will hold the Pelargikon of the Akropolis?" And finally, Strabo (IX, p. 401), also quoting Ephoros, is familiar with this twofold division of the Akropolis: τοὺς Πελασγούς, ἀφ' ἀν ἐκλήθη μέρος τι τῆς πόλεως [δηλ. 'Ακροπόλεως] Πελασγικόν (the Pelasgians, from whom a certain part of the city—that is, of the Akropolis—was called Pelargikon), and in harmony with this stands the passage in Thukydides (II, 17): τὸ Πελαργικὸν τὸ ὑπὸ τὴν 'Ακρόπολιν (the Pelargikon, the part that lies below the Akropolis).

The nine-gated Pelargikon can be conceived of, in the most general outline only, something as in the accompanying diagram.

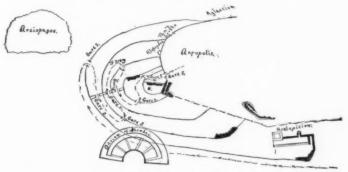


Fig. 1 .- The Pelargikon Restored.

The road must have wound in some such way, from gate to gate; and not only were the attacking forces in constant danger from the defenders on each succeeding terrace above them, but their advance was nine times blocked by gates, in which feature indeed lay the main strength of the fortress, and each time a new redoubt must be stormed, in order to push on step by step to the summit.

Of the later history of these colossal fortifications so much can be said. They certainly did not fall with the overthrow of Hippias, as Wilamowitz-Möllendorf ⁵⁰ supposes they did, for when three decades later the Mede invaded the land they still did remarkably good service. The few ⁵¹ Athenians who lacked the courage to go with Themistokles to Salamis built a stockade ⁵¹ in front of the outermost gate; for thus they thought to fulfill the conditions of the oracle which declared that their "wooden walls should be impregnable." ⁵² The Persians at once set these wooden walls on fire, but for all that were still no nearer capturing the citadel than before, although they outnumbered the Athenians a thousand to one. These old "Pelasgic" walls still defied them, and they were obliged to make their way to the citadel by climbing up a steep place behind these impregnable fortifications through the Aglaurion, where no one had dreamed they would come. ⁵²

The next information is given by the Eleusinian inscription (CIA. IV, 2, 27b), from which we gather that the Persians had partially demolished the walls and that in Perikles' time, to which the inscription belongs, builders had found in those overturned blocks of gigantic proportions an excellent stone-quarry, which they utilized until what was left was protected by the very statute that gives us this information.

Let those who are still inclined to follow Wilamowitz-Möllendorf and to believe with him that the Pelargikon was completely destroyed with the fall of the tyrants, or by the Persians, or by the transformations of the west end of the Akropolis incident to the building of the Propylaia of Mnesikles, consider this one fact: the upper wall of the Pelargikon was standing to a height of over thirty feet after the erection of the Mnesiklean Propylaia. So much is incontrovertibly certain; for we notice that the southeast corner

⁵⁰ Aus Kydathen, p. 107. The only foundation for his supposition seems to be the subjective feeling that if he had been the "victorious demos" such would have been the fate of the tyrants' stronghold.

⁶¹ HDT. VIII, 51: καί τινας όλίγους εὐρίσκουσι τῶν 'Αθηναίων, ἐν τῷ ἰρῷ ἐόντας, ταμίας τε τοῦ ἰροῦ καὶ πένητας ἀνθρώπους, οἱ φραξάμενοι τὴν 'Ακρόπολιν θύρησι τε καὶ ξύλοισι ἡμύνοντο τοὺς ἐπιώντας.... δοκέοντες ἐξευρηκέναι τὸ μαντήϊον τὸ ἡ Πυθίη σφι ἔχρησε, τὸ ξύλινον τεῖχος ἀνάλωτον ἔσεσθαι. αὐτὸ δὴ τοῦτο εἶναι τὸ κρησφύγετον κατὰ τὸ μαντήϊον καὶ οῦ τὰς νέας.

⁸¹ HDT., VIII, 51-52.

of the southwest wing of the Propylaia is beveled vertically from base-stone to cornice so as to fit up squarely against this wall, and this fact proves beyond a peradventure that this upper wall of the Pelargikon was still standing when the Propylaia were built, and was still higher than the roof of the southwest hall (30 feet).53 Otherwise such a bevel corner would have been worse than senseless. And it further proves that even Mnesikles and his associates still recognized the necessity of preserving the old fortifications for their original purpose; otherwise enough of that old wall would have been removed to make way for the new gateway, and the corner of the southwest wing would have been unmarred. And the condition of this upper wall at that time shows how well preserved the remains must have been, not only of the upper wall, but of the lower walls as well, for the upper wall, which in the last quarter of the fifth century they took so much pains to conserve, would have been practically useless without the lower walls; besides, as we shall presently see, these lower walls were seen by the traveler Polemon, two hundred years later. Moreover without the existence at the close of the fifth century B. c. of another such defensory wall below, and in it an actual fortress-gate, neither the situation suggested by Aristophanes in the Birds (826 (832)) and Lysistrata (480) nor the occupation of the Akropolis by the Spartan garrison in 403 g. c. can be understood. It would be a necessary assumption, even if we had no proofs.

Now comes, more than two centuries later, the Alexandrian periegete Polemon, who speaks of the ἐννέα πύλαι (nine gates) in a description so vivid that there can be no question but that, in spite of all the changes in and about the Propylaia, he nevertheless saw the entire lower Pelargikon with all its nine gates in a state of tolerably good preservation. For by the nine gates (which certainly can be nothing else than the ἐννεάπνλον Πελαργικόν—nine-gated Pelargikon) and the Kyloneion together he locates the position of the tomb of the hero Hesychos. And one does not define the location of a sanctuary, or anything else, by means of something that has long since disappeared or become unrecogniz-

⁵⁵ Cf. Dörpfeld, Mitth. Athen, X, p. 139-140.

⁵⁴ Frag. 49 (Schol. SOPH. Kol. 489).

able. Accordingly, in the days of Polemon, also, the Pelargikon with its nine successive redoubts still stood.

Again, even in Sulla's time (86 B. C.) the fortifications of the Akropolis were still so strong that Sulla's lieutenant, Scribonius, thought it wiser not to attempt to storm the citadel, but by cutting off the Klepsydra to compel Aristion and his forces to capitulate for want of water.

The above-cited passages from Lucian and Pausanias' remark that "all the walls of the Akropolis in his day, except those built by Kimon, were erected by the Pelasgians," are very significant. What Pausanias in effect says is that the Akropolis walls consisted in his day of two parts: 1) the wall of Kimon, to whom he assigns with probable correctness the whole upper encircling wall of the Akropolis, including the so-called wall of Themistokles, who almost certainly had nothing whatever to do with it, and 2) the wall or walls built by the "Pelasgians"-that is, all the fortifications on the west; for he certainly saw the upper wall, which we still see to-day at the south-east corner of the Propylaia (see PL. xv) and, as it seems to me, others besides. Accordingly, both Lucian and his contemporary Pausanias, seem to testify that the Pelargikon continued in fairly good preservation even into the time of the Roman Empire. At length by the building of the Odeion of Regilla, the outer ring or rings of the fortifications were for the first time broken through and so weakened that they were once more converted into a stone-quarry, and in this way the old Pelargikon fell into absolute ruin and disappeared. I am convinced that down to the times of Herodes Attikos the outer circle of the Pelargikon still stood from Klepsydra to Asklepieion as a wall of defense, with a real, defensory gateway. Otherwise I fail to understand the above-quoted passages from Aristophanes, or the occupation of the Akropolis by the Spartans in 403 B. c., or the procedure of Scribonius in 86 B. C., or the building of additional strong towers in the first century A. D.

In immediate connection with the Pelargikon we ought to consider for a moment the history of the approach to the citadel. No other part of the Akropolis, as the centuries have rolled by, has suffered transformation so complete as has its main entrance. In the earliest times the first or outermost gate lay opposite the Areio-

pagos and the road wound from terrace to terrace and from gate to gate up to the citadel. Inside the Propylaia the general arrangement was always essentially the same: just inside the entrance to the Akropolis proper the road divided into two branches forming the two principal streets of the Akropolis. Both led ultimately to the central point of the sacred enclosure—the great altar of Athena Polias, still to be seen a little to the north-east of the Parthenon (Pl. xv). The one to the right led between the old Athena temple and the Parthenon directly to this spot; the other, bending to the left, passed along the wall on the north side of the Erechtheion and so around to the altar.

There were several altars belonging to the Athena cultus upon the Akropolis of Athens, but one altar $\kappa a \tau^* i \xi_0 \chi \acute{\eta} \nu$, and it was accordingly officially called simply \acute{o} $\beta \omega \mu \acute{o}s$ (the altar), or \acute{o} $\mu \acute{e}\gamma as$ $\beta \omega \mu \acute{o}s$ (the great altar) without any further designation; and that is the altar of which I have been speaking, northeast of the Parthenon and southeast of the older temple and belonging to both. Like the great altar in Olympia, it also stands not squarely in front of the great temple but a little northeast of it, a huge, rectangular block of rock rising slightly above the level of the plateau on which it stands. 55

But it is outside the Propylaia and in the Propylaia itself that we are to look for the greatest changes. It is not a matter of mere alteration in the general plan of ascent, nor yet, as we shall see later, of building a new structure right on top of the old, but of eradicating the old entirely and laying the new road deeper. Near Beulé's gate the road in ancient times lay much deeper than that of the Roman period. For just inside this gate, north of the polygonal wall described above (PL. xv), and about two and a half metres below the level of the Roman staircase, the excavations have brought to light an altar in situ. This was one of those altars, probably all to chthonic divinities, which we know had of old been set up in the Pelargikon so and to the number of which it was in the time of Perikles forbidden to add. so

The polygonal wall just mentioned fixes the position of the terrace next above the one on which this altar stands, and is

⁵⁵ Cf. Dörpfeld, Mitth. Athen, XII, p. 51.

⁸⁶ CIA. IV, 2, 27b.

a further evidence that the road must have followed a wind-And furthermore that this continued to be the manner of ascent to the citadel until Roman times is conclusively demonstrated by the fact that at the elevation of the Nike pyrgos and the Agrippa monument the older road was higher than the level of the stairway. For the lowest courses of stone both in the Nike pyrgos and in the pedestal of the Agrippa monument visible above the steps were left uncuta sure evidence that at the time they were built so much of the foundations lay beneath the surface of the road and was not intended to be seen. Accordingly, even at the time when the Agrippa monument was erected (about 27 B. c. and certainly before the building of the stairs, for the monument in question faces not the stairs but the old road) the upper part of the road lay on a higher, and the lower part on a lower plane than does the corresponding part of the Roman stairway now existing; and the communication between these greatly differing levels must almost certainly have been effected by the winding terraces—or by a ladder.

We shall see later how, when the staircase was built, the very traces of the old approach almost wholly disappeared.

V.-THE AKROPOLIS UNDER PEISISTRATOS AND THE PEISISTRATIDAL.

Such, then, was the Akropolis, surrounded with its "Pelasgic" fortifications, the huge bulwarks at the main entrance in front themselves overhung by the mighty bastion on whose summit from remotest antiquity had stood the sanctuary of Athena-Nike. The citadel continued till into the time of the Peisistratidai to be the seat of sovereignty, for even after the assassination of Hipparchos, Hippias, in order to insure his supremacy, made it his stronghold. But from that time until the Middle Ages people dwelt in the lower city only. To Peisistratos and his sons the city owed the wonderful progress it made in those times; and it was indebted to them personally for more than one costly structure.

⁵⁷ E. g., the famous Altar to the Twelve Gods and the Enneakrounos in the Agora, the Olympicion (begun but not completed), the Pythion, a sanctuary of Apollo, the addition to the Gymnasion in the Lykeion, with its decorations and equipment, also

Some of the buildings that must have existed at the time of Peisistratos have already been mentioned. Let us now try as far as possible to picture to ourselves the Akropolis as it then looked. First we have to imagine two 58 temples which must have been there long before the time of Peisistratos and were doubtless still there in his day, but whose exact location cannot now be determined. That they did exist is abundantly proved by the invaluable remains of these very temples—the pediment reliefs of poros stone. All four of them are more or less well preserved. The first, which has been known since 1882, represents Herakles in combat with the Lernæan Hydra. This monster enemy fills the whole right wing of the pediment; the left is occupied by Herakles, with breastplate, bow and quiver, and his friend Iolaos with the chariot drawn by two horses headed toward the corner. This was the conventional arrangement of the figures of this familiar group and the artist did not feel at liberty to break away from the traditional form, however great difficulty it occasioned him. His horses could not be driven with heads erect into that sharp angle. But for the lowered heads, made necessary by the shape of the gable, some motive must be found. And the motive our artist has furnished with the touch of a master's hand. In the extreme corner of his pediment he has introduced the giant crab that came to the assistance of the Hydra, and the horses, catching sight of the monster as it creeps toward them, bend down their heads to sniff at it, as if even to them it were an uncanny sight.50

the construction of water-works on a magnificent scale, and of beautiful, broad streets. We observe, therefore, that it was the city proper and the suburbs even more than the Akropolis that were the objects of their especial attention and care.

⁵⁸ A third—the temple of Aphrodite $\dot{\epsilon}\phi$ 'Ιππολύτ $\dot{\phi}$ —is known to us only through the obscure reference of a scholium to Eur. Hipp. 30: $\dot{\epsilon}\nu$ τ $\dot{\eta}$ 'Ακροπόλει $\dot{\epsilon}\delta\rho\dot{\phi}\sigma$ ατο ($\dot{\eta}$ Φαίδρα) 'Αφροδίτης $\dot{\epsilon}\epsilon\rho\dot{\nu}\nu$ $\dot{\epsilon}$ πὶ κακὸν 'Ιππολύτου.

'Αφροδίτης ναδν ίδρωσασθαι την Φαίδραν φασίν. 'Εκάλεσε δε' Αφροδίτην έφ' Ίππολύτω, ην καί Ίππολυτίαν καλούσιν.

A highly interesting feature of these four, the earliest of all the pediment-reliefs known to us, is the polychromy; but however inviting a digression upon this much vexed theme might be, it does not properly belong to a "History of the Akropolis." Still so much may with propriety be said, in order that the reliefs may be presented more vividly to the reader's mind: the background is not painted at all; the figures, however, raised in relief upon it, are colored in a manner true to nature. The naked

An excellent companion piece to this we find in a second pediment relief of the same size and workmanship, discovered like the other in the southeast corner of the Akropolis, and representing an adventure of Herakles that has at least an external resemblance to the former one. In this relief we see the hero struggling with the älios $\gamma \acute{e}\rho\omega\nu$, Triton, the Old Man of the Sea. Herakles has thrown himself upon Triton with the whole weight of his powerful body and grasping his opponent about the neck with his left arm he draws on that with his right and threatens to crush his throat and chest as in a vise. Triton, finding himself in so dangerous a case, tries but feebly to defend himself with his left hand while he stretches out his right as if imploring aid from the person or persons on the left side of the gable. For in that quarter we must necessarily restore in our imagination a spectator or spectators of the contest, as in the third relief of our series.

How suitable a companion piece for the snaky coils of the Hydra are those of the fish-monster, Triton! and in view of all the remarkable coincidences of subject, place of discovery, workmanship, and dimensions, we are compelled to assume that both pediments belonged to one and the same amphiprostylos. And to whom then alone of the gods can this temple have been sacred? Only to Herakles. To be sure, neither history nor tradition tells us anything of a Herakleion upon the Akropolis; but what further proof of its existence do we need than these same two pediments, especially since we know that the Attic people anciently worshiped him as a god, and since both tradition and monuments of every sort reveal the intimate relation in which he stood to the guardian goddess of the city? But in regard to this little temple it is easy to understand why tradition should be silent; for the Persians doubtless destroyed it, and after the war the Athenians had something better to do than to rebuild the temple of a divinity that had now become specifically Dorian. So the very site of the Herakleion was obliterated and forgotten-perhaps even taken by some other building.

Thus we have made the acquaintance of a temple of whose ex-

parts of Herakles and Iolaos, for example, are flesh-colored, while eyes, hair and beard of Iolaos (Herakles' head is lost) are black. The Hydra's heads are a bright green, while its opened mouths are red. A peculiar feature in the Typhon pediment is the blue-bearded giant. Both the reliefs are produced in the colors of the original in the "Denkmäler des Instituts," I, 30.

istence on the Akropolis no more is known. But it is not the only one unknown to literature among the temples belonging to that period. For besides these poros pediment reliefs two others have been found. The first represents (Pl. XVII), like the relief above described, the struggle of Herakles with the Old Man of the Sea, but it is larger than the other, and the combatants in this, the larger relief, occupy the left wing of the pediment, while the corresponding figures of the smaller one are intended for the right. This time we find the spectator of the contest still preserved—a creature, man above and snake below, holding in his right hand an eagle, the symbol of royalty. This regal personage is in all probability Kekrops himself, who is here present as umpire, opinital we find him in the west pediment of the Parthenon.

And again the corresponding pediment is not wanting; it represents the battle of Zeus with the "τρισώματος Τυφῶς" 61—the



Fig. 2.—The Serpent (Echidna) in the pediment.

triple-bodied Typhon. Typhon is represented as a monster with three human bodies furnished with three pairs of wings and terminating below the breast in three great snaky coils that ultimately unite inextricably in one; growing from its bodies smaller serpents writhe and hiss. Filling the other angle of the pediment is a giant serpent, in which, participating as it does in this mighty conflict, we are perhaps to recognize Echidna, Typhon's spouse (fig. 2). From the middle of the pediment we see Zeus and Herakles hastening from the heights of Olympos against their monstrous foes—the father of light and his son, in human form and in the service of mankind, rushing on to overthrow the unre-

⁶⁰ Cf. Marm. Par. 1; APOLLOD. III, 14, 1 sq.; PAUS. I, 2, 6; HYGIN., Fab. 48; EUSEB., Chron. 6, 22, etc.

⁶¹ EUR., H. F. 1258.

strained Vulcanic forces that threatened to confound the order of the universe.

Here again are two pediment reliefs of the same material, of precisely the same dimensions, and of the same style; the representations also are not without connection. These two also unquestionably belonged to one and the same building. We can only guess that this building may have been a temple to Zeus, perhaps to Zeus Polieus, who, as we know, had a cult on the Akropolis, and whose altar and statues—the primitive one and beside it the new statue by Leochares-were seen by Pausanias (I, 24, 4). At any rate, it seems certain that the worship of Zeus upon the Akropolis of Athens is as old as that of Athena herself. the greatest of the gods everywhere. To him Athena vows the sacrifice of a bull if she shall vanguish Poseidon in the contest, and to him she pays her vow. His importance may once have been greater than that of his daughter, but certain it is that at Athens, however great it once was, the worship of Zeus gradually paled into comparative insignificance before that of the vanquisher of the god of the sea.

In the first paragraph concerning these ancient reliefs, it was stated that they were at least older than Peisistratos. exact date for their creation is, of course, impossible. ception, especially of the Hydra relief, is worthy of a great master; for it is a matter of no small significance that every position, even down to the finest details, has an excellent motive. Still, we are fully justified by other considerations, such as that of execution, in assigning to these reliefs a somewhat earlier date than the first half of the sixth century. Earlier than that time, to be sure, even the temples of the gods were usually built of wood and other perishable material; but temples adorned by pediment reliefs of stone were never built of wood and sun-dried bricks but of stone. A temple of stone, however, earlier than the sixth century B. C., is not an altogether inconceivable thing. Furthermore, these reliefs have no figure directly under the angle in the middle of the pediment, as have the pediments of the temple of Aigina, of the treasure house of the Megarians at Olympia, and probably also of the old Polias temple on the Akropolis. The poros pediments, how-

⁶² This is the date assigned by METER, Mitth. Athen, X, 328.

ever, were wrought at an earlier time, before it had become the established rule to put into the middle of the pediment the principal figure of the group adorning it. This feature, together with the composition, the coloring and the style as compared with the pediment group made for the Polias temple under Peisistratos adequately warrant us in dating our reliefs far back into the seventh century before our era.

With regard to the third temple earlier than Peisistratos' day—the old temple of Athena—with regard to this we can reach results more definite and certain. The credit of having discovered the remains of this temple belongs to Wilhelm Dörpfeld. Only the foundations with a part of the stylobate are still preserved in situ between the Erechtheion and the Parthenon (see Pl. xv); but there are elsewhere scattered architectural pieces of the building in number sufficient to enable us, with Dörpfeld's help, to picture, at least with a certain degree of accuracy, how the temple must have looked.

In the north wall of the Akropolis, a little to the west of the Erechtheion, are to be seen quite a large number of architectural fragments of the temple; still others are found in the south wall, all of which have contributed not a little to its reconstruction. These fragments consist of drums and capitals of columns, architrave-blocks, triglyphs and cornices—all of poros stone—and metopes of marble. From the dimensions of these fragments and of the foundations Dörpfeld has proved not only that they belonged to one and the same building, but also that that building was a hexastyle peripteral, with six columns at each end and twelve on each side—the corner columns being, of course, counted twice. As the remaining pieces of stylobate show, the columns stood, like those of the Heraion at Olympia, upon a platform only one step high, instead of three, as the rule is. Such was its appearance in general.

The ground-plan (PL. xv) reveals unmistakably 1) in the eastern end, besides the pronaos, a cella, which is divided by two rows of columns into three parts—nave and aisles, like a Christian church. In this respect this older temple is precisely like the later Parthenon. Completely separated by a solid wall from the eastern half is found 2) the opisthodomos, forming the western half of

the temple. In this respect again it is precisely like the Parthenon. In one point only does the inner arrangement of the older temple differ from that of the Parthenon: the latter has as opisthodomos a single large room preceded by a pronaos, while the western end of the former contains, besides the pronaos and cella proper, two smaller chambers 63 adjoining but not connected with the cella on the east. The eastern cella was, of course, the sacred shrine of the goddess; but what purpose did the back rooms serve? This question is answered fully and unequivocally by official documents, inscriptions of earlier as well as of later date than the Persian wars. The whole opisthodomos was the treasury of Athens. In the large room to the west (E) the state-funds were kept; this was certainly the case after the Persian wars and probably also from the very beginning. In the smaller chamber to the right, that is, the room on the south side (G), were preserved the moneys of Athena and in the left room (F) those of the other gods.64

Furthermore, if we examine the foundation walls more closely, we are struck by another fact of peculiar interest, namely, that the temple originally possessed no peristyle at all. For, in the first place, the foundations that supported the stylobate are of different material from those of the inner temple: the latter are built of the blue limestone taken from the Akropolis itself; the former are constructed of the hard Peiraieus stone. This difference of itself at once suggests with strong probability the inference that the vaós proper is older than the peristyle and this a later addition. But there is a further point of difference that is of still greater significance: the substructure of the cella, the inner sanctuary, shows faint indications of a striving toward horizontal courses in the masonry, though in reality the effort has succeeded only with the uppermost stones and at the corners.65 The foundation walls of the colonnade, however, are at the bottom polygonal and scarcely hewn, but above they are carefully cut with both horizontal and vertical surfaces and neatly fitted.

All the circumstances connected with the discovery of the various parts of this temple, and especially of those parts built into

⁶³ Cf. DÖRPFELD, Mitth. Athen, XI, p. 340.

⁶⁴ CIA. 1, 82; DÖRPFELD, Mitth. Athen, XII, p. 38.

⁶⁶ Cf. Dörpfeld, Mitth. Athen, XI, pp. 345-346.

the Akropolis walls, show that it belongs to a time previous to the Persian wars. When the vaós was built we can never discover, but with reference to the peristyle we have more exact chronological criteria: the substructure is with respect to material and technique precisely like the foundations of the Olympieion at Athens, which, as is well known, were laid by Peisistratos, as well as those of other buildings of the same date. We shall be entirely safe, therefore, in concluding that it was in the age of Peisistratos that the peristyle was added to the old temple, and the style of the architectural fragments of the upper parts also of the colonnade is strongly corroborative of this conclusion.

The pediment of this new peristyle was ornamented with a plastic group—Athena in the battle of the gods against the giants. The Athena herself is partly preserved (PL. XVIII), and her position shows that the battle is already decided in her favor. Her enemy—Enkelados (?)—is also not entirely lost. And in addition to these we may with Studniczka recognize in the giant warrior striding toward the (spectator's) left some other deity participating in the fight.

There prevails in all the fragments a degree of vigor and animation far surpassing that found in the Æginetan marbles. Above all is this true of the Athena. The large, rounded, somewhat protruding eyes of the Peisistratic Athena seem hardly in keeping "with the delicate softness of her cheeks and the exquisitely fashioned lips;" that incongruity disappears when we consider that the artist, in fashioning those eyes as he did, was counting upon the effect of height and distance and has presented to us, accordingly, in corporeal reality the epithets $\gamma \lambda a \nu \kappa \hat{\omega} \pi \iota s$ and $\gamma o \rho \gamma \hat{\omega} \pi \iota s$ ' $\lambda \theta \eta \nu \hat{\eta}$." Still, the animation and vigor of the Peisistratic pediment, over against the cold formality and lifelessness of the Æginetan pediments, are not sufficient cause for assigning, as has been done, on earlier date to the Æginetans than to these fragments from the Akropolis. Another consideration of far more

⁶⁶ E. g., the older temple at Eleusis.

⁶⁷ The fragments are published by STUDNICZKA, Mitth. Athen, XI, p. 187.

⁶⁸ STUDNICZKA, frag. 9a-12.

⁶⁹ L. c., p. 180.

⁷⁰ STUDNICZKA, l. c., pp. 196-197.

importance than vigor of conception and of execution has been overlooked, namely the acquaintance of the Æginetan artists with human anatomy and the skill with which the details of all the forms are worked out. This it is that marks the more advanced stage of artistic development and in this the Æginetan sculptures are vastly superior to the fragments of Peisistratos' pediment. So the Æginetans will keep the place they have so long occupied, about 470 B. c., and the fragments of the Akropolis pediment will take their place in the latter part of the vi century. Earlier than Peisistratos (560–527) they cannot be, for the foundations of that part of the building on which they stood will not admit of an earlier date. Of the later date their style will not admit.

Since, then, everything points with unmistakable evidence to the time of Peisistratos, can we not make him himself responsible for the extension and improvement of the temple with its colon-nade and plastic decoration? He stood, as we well know, in a close relation to Athena; he moved his royal residence into her sacred enclosure; he was the first to stamp the coin of Attika with Athena's head; it was he who so enriched her cultus by the introduction of the Great Panathenaia with their magnificent procession and the presentation of the peplos. Who else in his age than the great Peisistratos, the lover of art, who did so much beside for the improvement and adornment of the city of Athena, who else than he should have added to Athena's temple the colonnade and the sculptures that in his day were erected?

By the last excavations upon the Akropolis our acquaintance with the art of this period has been wonderfully enriched, for through them inestimable treasures of pre-Persian sculpture have been brought to light. The "Tanten," as the Germans call that row of archaic female statues, about forty in number, are so well known that they need no more than a passing mention. But it is worth while to notice that even in this earlier period, before the beginning of the Persian wars, Athens was an art centre, and that there were then busy in Athens a great number of sculptors, both native and foreign, whose works, some with signatures and some without, have been recovered in comparative abundance from the débris of the Akropolis. Let me mention, for the sake of example, only a few such well known names as Endoios of Athens (?), Kle-

oitas, Aristokles, Aristion of Paros, Kallon and Onatas (Mikon's son) of Aigina, Theodoros⁷¹ of Samos (?), Archermos of Chios,⁷² and Antenor. But through these excavations we have also made the acquaintance of sculptors who were before entirely unknown to us; for example, Evenor,⁷³ Eleutheros,⁷⁴ Philon,⁷⁵ and many others.

Besides these sculptures in marble and stone, a great many pieces of bronze have been found—some in the round, some in repoussé;—and we must not forget to mention the terracottas and the invaluable fragments of vases that have settled forever the furious strife over the chronology of 'vase-paintings and vase-painters.

People are accustomed to picture the Akropolis of this period to themselves as comparatively empty. But that seems not to have been the case; we have seen there a stately temple of Athena, a complex temple of Erechtheus and Athena together, a temple of Zeus Polieus (?), a Herakleion, and the royal palace of the ruling prince. But that is not all; even in this archaic period there had been gathered together about these sanctuaries in the course of time a great host of statues and altars and votive offerings of every sort. The pre-Persian votive inscriptions that have been brought to light form, we may safely say, the very smallest part of the whole number that were there before the Persian invasion, and yet over three hundred of them have been recovered from the ruins left behind by the barbarians. These votive offerings were the gifts not only of private individuals, but also of the state. Among . the latter class, though marking the very end of the period under discussion, the monument to the heroism of Aristogeiton's mistress Leaina, the tongueless lioness in bronze, which survived even the devastating rage of the Mede and was still seen in the Propylaia even by Pausanias (I, 23, 2), should not be passed without mention.

Of no less interest, to say the least, is the famous bronze quadriga, seen by Herodotos (V, 77), and more than half a millennium later by Pausanias (I, 28, 2). It was erected from the tithes of

⁷¹ CIA. IV, 2, No. 37390

⁷ Ibid., No. 37395

¹⁸ Ibid., No. 37388_88

⁷⁵ Ibid., No. 373104

the ransom, two minae per man, paid by the Bœotians and Chalcidians for their soldiers taken captive by the Athenians in the great double victory of 507 B. c. Concerning this monument many questions have arisen to which the future, we trust, may find some universally satisfactory answer; for as yet, in the case of some of the problems, no attempt even has ever been made to solve them, while others have been answered in every conceivable way, but are still unsettled. Pausanias 76 mentions the chariot, and from the context it is clear that he found it near the so-called Athena Promachos, between this and the Propylaia. But Herodotos gives us what at first sight seems to be an almost exact location of this celebrated work of art: 70 66 (the chariot with its four horses) ἀριστερής χειρὸς ἔστηκε πρώτον ἐσιόντι ἐς τὰ Προπύλαια τὰ ἐν τŷ ᾿Ακροπόλει, which is usually translated: "It stands on the left just as you enter the Akropolis through the Propylaia." But this the Greek by no means says. What the text of Herodotos does say is that "the first thing you see on the left as you enter the Propylaia is the bronze chariot." The trouble is that interpreters have thought of the Propylaia as a gate in a modern fence, and not as it is, a great building with a deep hall in front and another in the rear with doors connecting; in other words, the Propylaia might fairly be called the "vestibule" of the Akropolis. As our text stands, then, it cannot be otherwise translated than substantially in the way I have suggested. If, then, the reading ἐσιόντι ἐς is correct, Herodotos must mean that the chariot stood in the Propylaia; for the first thing you see when you enter a vestibule is not something several rooms beyond.

Now begins the trouble. Weizsäcker⁷⁷ locates the monument in the east portico of the Propylaia and others have followed him; Michaelis⁷⁸ mathematically proves this hypothesis to be untenable. Bursian⁷⁹ with greater probability puts it in the west portico; but

⁷⁶ That he calls it άρμα and not τέθραπος does not, in a writer like Pausanias, necessarily imply, as has been supposed, that the horses were gone and only the car left, though of course they may have been carried away long before his day.

⁷¹ Arch. Zeit. XXXIII (1875), p. 46.

⁷⁸ Mitth. Athen, 11, pp. 95 sg.

⁷⁹ Litt. Centralblatt, 1875, col. 1080.

no unprejudiced reader of Pausanias' description of the Akropolis can grant even the possibility of that. For Pausanias came that way in order to reach the Pinakotheke, and it is not in accordance with his strictly topographical method to have passed by so important and interesting a monument or one so ancient, and then to mention it, as it were, in an appendix, after he has made a complete tour of the whole inner Akropolis with its sanctuaries and its monuments, and is on the point of leaving.

Ernst Curtius 80 rejects both sites and, emphasizing the future meaning of $\epsilon l\mu \iota$, which is often especially strong in the participle, translates: "as you are on the point of stepping into the Propylaia, you find on your left the chariot, etc." In accordance with this interpretation he puts the quadriga immediately in front of the west portico of the Propylaia. This is just as completely out of harmony with Pausanias as the interpretation that brings the quadriga into the Propylaia; and, furthermore, as Wachsmuth in Fleckeisen's Jahrbücher 1879, pp. 18-23, has proved at length, it is out of all harmony with Herodotos' usage of the expression ἐσιόντι (έσιοῦσι ἐξιόντι, ἐξιοῦσι, etc.) For when Herodotos says that an object is ἐσιόντι ἐπὶ δεξιά or ἀριστερά without any more exact local designation, st he always means something on the inside of the enclosed space of which he is speaking. Moreover the participle of elu is not only not always strongly future, but is often relatively present or even past in meaning. Therefore, finding all these attempts to reconcile topographical necessity with the words of Herodotos to be futile, Wachsmuth declares the text corrupt and writes for " ἐσιόντι ἐς τὰ Προπύλαια" " ἐξιόντι τὰ Προπύλαια" and places82 the monument, as other topographers83 do, in exact conformity to the description of Pausanias, on the left side of the road from the Erechtheion to the Propylaia, and not far from the latter.

But are not all these scholars taking some things for granted that are by no means so very certain? Is it certain, as all these men assume, that Herodotos is talking about the Mnesiklean

⁸⁰ Arch. Zeit. XXXIII, pp. 54 ag.

⁸¹ Cf. also HDT. 1, 51.

⁸² See also WACHSMUTH, Stadt Athen, I, p. 150.

⁸³ Cf. Michaelis, Mitth. Athen, II, p. 96; Leake, Topogr. of Athens, I, p. 351; Baehe, Ad Hdt. v, 77.

Propylaia, built 437–432? Granting that Herodotos returned to Athens after the beginning of the Peloponnesian War, is it not possible, or even probable, that the fifth book was finished before his return? And if so, how can we know that he altered this one sentence so as to apply to the change in the entrance to the Akropolis? If, then, Herodotos had in mind the older Propylaia, all these great Germans are quarreling over a difficulty that does not exist. These questions can perhaps never receive a final answer. But so much may be said, that while Herodotos may possibly have been acquainted with the Propylaia of Mnesikles, he certainly was well acquainted with the older Propylaia; and if he had that in mind when writing the passage in question, then there is no difficulty either of fact or of interpretation.

If our text of Herodotos is correct—and the burden of proof rests upon those who deny it—then the chariot must have stood in the old Propylaia, or just in front of it. In it there was an abundance of room even for this colossal monument; and when

⁸⁴ Kirchhoff (in his exceedingly able and keenly critical essay Ueber die Abfassungszeit des Herodotischen Geschichtswerks, 2d edition, Berlin, 1878, pp. 12-18), proves beyond the shadow of a doubt that the first two and a half books of Herodotos' history were written in Athens, before his departure for Thurioi in 443-2, and he makes it equally clear that from III, 119 to about V, 77 (the passage in which mention is made of the Propylaia), was written at Thurioi before his return to Athens, 432-1. But, with the exception of this one unfortunate passage (V, 77), there is nothing whatever in his history to indicate that Herodotos ever saw Athens again until we come to VI, 98. For my part, I do not think that we have any sufficient grounds for supposing that he ever came back to Athens at all. Kirchhoff, furthermore, overlooks entirely the fact that there was an older Propylaia, and thus fails tosee the possibility that Herodotos may be speaking of that, just as, in his first edition, he had proved that Herodotos was in Athens in 431-30 by the historian's mention (VII, 162) of a funeral oration by Perikles; this funeral oration he at once identifies as the famous oration over the dead of 431-30, overlooking the fact that Perikles had delivered another funeral oration some nine years earlier over those who had fallen in the campaign against Samos; and this, according to Kirchhoff himself, in his second edition (p. 19, note), is the one referred to by Herodotos. Upon the hypothesis that Herodotos is speaking of that older Propylaia, our passage is easily explained and understood without the supposition that when he wrote it he had already returned from Italy. To me, therefore, it seems more than possible that our passage was written before Herodotos saw the new building at the entrance to the Akropolis (if he ever really did return from Thurioi), and that he afterward failed to note the change. Such an oversight would not be in the least surprising; even Thukydides neglected to correct his statement that there had never been but one earthquake felt on the island of Delos (THUK. II, 8; cf. HDT. VI, 98), although he certainly must have discovered his mistake before his work was done.

Perikles and Mnesikles began with their new plan and removed almost all traces of the older gateway, the chariot, whether it stood actually inside or immediately in front of it, had to be moved and it was moved to a new site not far away. It was set up upon a new basis—perhaps the substructure $2\frac{1}{2}$ —3 metres long, still to be recognized near that of the so-called Athena Promachos (see Pl. xv)—and the inscription was renewed upon it. I say renewed, for a part of the new inscription is still preserved and the letters bear the character of the latter part of the Periklean age. In addition to this remnant of the renewed inscription we have also the recently discovered fragment of the older inscription in characters that antedate by not a few years the age of Perikles.

Still there is another question that must be considered herethe date of the quadriga's erection. Was it set up immediately after the victory, that is, in 507-506? If so, how did so valuable a piece of metal escape the devastations and the greed of the Persians? 'Tis true the Leaina was neither destroyed nor carried away; but in the case of the chariot we have no evidence. The inscriptions we possess are certainly considerably later than 507: was the monument also, as well as the inscriptions, first made at a later date? Or was the original inscription alone twice in turn, perhaps, replaced with the newer ones which we have? And if the monument was erected in 507, perhaps it was destroyed or carried away by the barbarians, and what both Herodotos and Pausanias saw was a copy of the older statue, like the group of Harmodios and Aristogeiton. Perhaps, however, the Persians only overturned and damaged the old monument of 507, which was thereupon repaired by the Athenians and provided with a new inscription—the older one of the two that have come down

85 The epigram, given entire by Herodotos (v, 77), is as follows:

"Εθνεα Βοιωτών καὶ Χαλκιδέων δαμάσαντες Παΐδες 'ΑθΗΝΑΙΩΝ" ΕΡΓΜΑσιν ἐν πολέμου Δεσμῷ ἐν ἀχλυόεντι σιδηρέψ ἔσβεσαν ὕβριν · Τῶν ΠΠΟΥΣ ΔΕΚΑτην Παλλάδι τάσδ' ἔθεσαν.

The Periklean inscription (CIA. I, 334; in fac-simile, Kirchhoff, Monatsberichte der Berl. Akad. der Wiss. 1869, pp. 409 sq.) was complete in two long lines, each containing one hexameter and one pentameter, and the letters preserved are these: ηναίων ξργμα.....

..... ππος δεκά

to us. And perhaps again, like the "Promachos," it was never erected at all until long after the event it was intended to commemorate. This last again is Kirchhoff's hypothesis, so and he finds no more fitting occasion for its creation than Perikles' victory over the sons of those same Bœotians and Eubœans in 446 B. C. It is, however, apart from the fact that we have the inscription in letters much older than 446, extremely improbable that through all these subsequent wars with their neighbors, the life and death struggle with the powers of Asia, and the accomplishment of their stupendous building projects which followed—that through all these sixty years of vicissitude and unexampled outlay, such a fund could have been sacredly kept apart for its original purpose.

Thus we have established several things beyond fear of successful contradiction: 1) Herodotos is undoubtedly speaking of the pre-Periklean Propylaia. 2) The chariot and horses he describes stood in his day in the old Propylaia or, if we take the participle ἐσιόντι in its future meaning, just in front of the old Propylaia. 3) The monument in question changed sites at least once and possibly twice: a) Before the Persian wars it may have stood not far from the west front of the old Athena temple, where, as we know, were hung the fetters in which the captive Bœotians and Chalcidians had been kept bound, which fetters formed a part of the same votive offering as the quadriga (Hdt. V. 77). b) The Persians may have destroyed the original monument or carried it away with them, in which case a new one as nearly as possible like the old was made to take its place and set up in or in front of the old Propylaia; or they may only have broken and injured the old monument, in which case it was repaired, provided with a new inscription—the older of the two we have—and set up in the place where Herodotos saw it—in or in front of the old Propylaia; or else it may possibly not have been erected at all until after the Persian wars, in which case it would have occupied the place indicated by Herodotos, and to it would have belonged our older inscription. c) When the new Propylaia was built, the

⁸⁶ L. c., p. 414.

⁵⁷ Dr. Dörpfeld has kindly called my attention to the fact that, since the discovery of the older inscription, Kirchhoff, in a short article in the *Abh. d. Berl. Akad* (1889), has withdrawn unreservedly from his former position.

monument was moved into the Akropolis proper and again provided with a new inscription—the later one of the two we have; and here it was that Pausanias saw it.

VI.-THE PERSIANS IN ATHENS.

The year 510 B. c., witnessed the overthrow of the last of the sons of Peisistratos. With the fall of Hippias the magnificent architectural enterprises of his father's house came to a stand-still. The political revolutions that followed the expulsion of the tyrants left the Athenians no time for improving and beautifying their city, and soon the foreign foe demanded for another decade or two their exclusive attention.

It was in the year 500 B. c. that Dareios decreed the utter destruction of Athens. Athos and Marathon were his only reward. It is familiar to every school-boy how, when in 480 B. c. the Persians again approached, only a few aged and helpless Athenians along with the priests and their attendants sought safety in the Akropolis. This handful of people, for the most part unfit for war, took refuge behind the old "Pelasgie" fortifications of their citadel, barricaded the old approach, and then for a long time, weak as they were, held out against the countless hordes of the The hosts of Asia directed their attack from the Areiopagos, as centuries before the Amazons had done; they burned the palisade—the "wooden walls," in which the defenders had persuaded themselves to put their trust—and still, with all their numbers, the citadel could not be taken. Only by scaling the wall in an undefended spot, the point above the Aglaurion on the north side, where because of the steepness of the cliffs no one had thought that they could climb up,88 the Persians finally obtained possession of the fortress. And then the sacred enclosure with all its sanctuaries and the fortifications which still stood was burned and, as far as possible, destroyed; the hundreds of statues and other votive offerings that had been gathered about the temples were either carried away by the rapacious barbarian or, in case their material could be turned to no account, thrown down

⁸⁸ HDT. VIII, 52; see p. 484.

^{*} Ibid. 58 : τὸ Ιρὸν συλήσαντες ἐνέπρησαν πάσαν τὴν 'Ακρόπολιν κ. τ. λ.

and mutilated; even the pedestals did not escape the devastating rage of the Persian. The ruin was complete.

Accordingly, a few days later, after the retreat of the invaders which followed their overwhelming defeat at Salamis, the returning Athenians beheld amongst the ruins of their sacred rock only a few dismantled, smoke-blackened walls; perhaps the most of the great columns of the largest temple there, the Temple of Athena, were still standing; for the Persians in all probability could not destroy the whole edifice to its very foundations. They burned what could be burned, and broke in pieces what they could; but the temple walls and the columns were for the greater part left standing. That is obvious, even to the most casual observer, from the present condition of the architrave, triglyphs, metopes and cornice pieces built into the north wall of the Akropolis. These architectural members of the ancient temple, built into the wall in the manner in which we now find them, were not taken from the ruins of a collapsed building, but as the state of their preservation shows, they were carefully taken down from a building yet standing and placed with evident design in the position that they now occupy. Indeed, with the means at their command, the Persian soldiers would not have been able to destroy utterly a temple of the magnitude of the Hekatompedon; they could only set it on fire and deface it. As long as gunpowder was unknown, the destruction of buildings in time of war could be complete only when they were of wood or other light material. To realize this fully, let us think, for example, of the temple at Corinth, of which, albeit the city was so many times completely destroyed, so much is still standing.90

Immediately after their return from Salamis, the Athenians proceeded to restore temporarily their temples and their altars. New buildings were, for the present, entirely out of the question; for in the very next year (September, 479 B. c.), owing to the treacherous policy of Sparta, the Akropolis fell a second time into the hands of Mardonios, who at first spared Attika purposely, still cherishing the hope of winning the Athenians over to his side; but when he failed in this, he then destroyed everything that had

⁹⁰ Cf. Dorpfeld, Mitth. Athen, XV, p. 424.

chanced to escape in the preceding year. Again returning from their temporary exile, the Athenians had not much more than a great heap of debris where once the glories of the age of Peisistratos had shone. How complete the destruction was we have most eloquent witnesses in the statues and architectural pieces, which, during the last few years, have again come forth from the ruin then created.

But when the enemy was gone and Hellas again breathed freely, the brave "sons of the Athenians" resolved that their old Kekropia should rise from its ashes in a new and brighter glory than their fathers had ever dreamed of. Themistokles, indeed, the great man who had safely piloted his country through the storms of 480–478, and who for centuries left the stamp of his genius so indelibly impressed upon the history and policy of Athens, tried to induce his countrymen to abandon their ruined homes and found a new empire about the Peiraieus Bay. But it proved even more difficult to persuade the Athenians to leave their Akropolis with its shrines and sacred memories than it was to win the Romans a century later from the ruins of their Palatine and Capitol to a new and fairer home at Veii; and there, like the Romans, they staid, determined to see the magnificence of their new plans realized.

VII.-THE REBUILDING .- THEMISTOKLES-KIMON.

The Akropolis lay in ashes. It was a spot as worthy of a glorious resurrection as the need was great. On the very spot where the enemy had vented their wildest fury and in barbarian insolence had outraged the goddess herself, there the new splendor was most loudly to proclaim how Athens, with the help of the gods, whose sanctuaries had been burned, had fought and won against countless odds and laid the foundations of undreamed-of glory.⁹²

The leaders knew, however, that before all these plans should be accomplished a number of years must pass. In the first place,

 $^{^{91}}$ Hdt. ix, 13: ὑπεξεχώρεε έμπρήσας τὰς ᾿Αθήνας καὶ εἴ κού τι ὁρθὸν ἢν τῶν τειχέων ἢ τῶν οἰκημάτων ἢ τῶν ἰρῶν, πάντα καταβαλών καὶ συγχώσας—except, as we learn from Thukydides I, 89, 3, the few houses occupied by the Persian officers.

⁹² Cf. WACHSMUTH, Stadt Athen, I, p. 589.

the whole lower city was to be surrounded with a wall, in order that in future the inhabitants might not be compelled, at the approach of a dangerous enemy, to flee from their country and leave their homes and the temples of their gods to be mercilessly plundered and burned.93 And in the next place, they were to adorn anew the sacred hill of Athena. Accordingly, they found it necessary to restore their temples and altars again only temporarily in a manner sufficing merely for the barest necessity. This includes, of course, the ancient temple of Athena as well as that of Erechtheus; for it were absurd to suppose that from the timeof the Persian wars until the completion of the Parthenon-forty years—the protecting goddess of the city should have remained in total want of any sort of temple, or that the Athenians, especially during this period, when the amount of their public moneys and the number of their votive offerings increased so vastly, should have remained so long without a treasury in which to preserve them. Will any one interpose that the old Erechtheion may have been used for that purpose? No; for, in the first place, it was too small; in the second place, it served other purposes; and besides, on what possible grounds should we suppose that that sanctuary should be restored sooner than the temple of Athena? The conclusion is irresistible: the Hekatompedon must have been restored at once. Still no attempt was made to restore the ancient splendor of the old building, for the very reason that they had already begun to build on the more splendid new temple of the Polias. Therefore, paying no attention whatever to the colonnade or other outward ornament, they simply put the cella and the opisthodomos in order and made the necessary repairs. That the colonnade was entirely disregarded we can plainly see from the fact that when they came to rebuild the Erechtheion, nothing stood in the way of their placing the porch of the Korai immediately upon the pillarless stylobate of the old Hekatompedon. In just what the repairs consisted we can only surmise: a new roof, of course, was necessary as well as new doors; the holes in the walls were filled up and perhaps the whole building repainted. And then once more the treasure of Athena and the vessels and other utensils used in the sacred processions found secure keeping

⁹⁸ Cf. Dörpfeld, Mitth. Athen, XI, p. 163.

in the old opisthodomos, and here were deposited in 454 B. c. the funds of the Confederacy, which were in that year transferred from Delos to Athens. 94

Even these repairs, however, as I have said, were only temporary; for Themistokles had, perhaps, already planned the reconstruction both of all the sanctuaries of the Akropolis and of its circumscribing wall, and had begun to adorn in a manner worthy of such a capital the city that had now become the head of Hellas. A more favorable opportunity could never be offered than that which now came to Themistokles and his three great successors. Architecture, sculpture and painting were just on the eve of their first full perfection and glory; the people were elated by the fame of their glorious city; their navies ruled the seas; their harbor was the market place of the Grecian world; the tribute of a hundred cities and islands was poured into the coffers of Athens; the finest marble for the new works was to be had within a few miles of the city in almost inexhaustible quantities; and Athens was not wanting in the minds to conceive the plans nor the artists to execute them.95

But only after the entire completion of the strong defensory wall about the city could Themistokles proceed to the work of adorning the citadel. Whether he himself began this work and really built the north wall which bears his name is not certain. any rate, Kimon, if, indeed, he did not conceive the plan, carried forward the work, and the recent excavations have made it evident that he should be accredited with completing a greater portion of the great plan than has been heretofore attributed to him. To be sure, the most of the glory justly belongs to Perikles and his great artists; theirs it was to give to the Akropolis of Athens that radiance which made it for all time the centre of art for the world. But even the project that Kimon began to realize calls for our admiration and our wonder, not only on account of its magnitude, but on account of its political significance as well. It is an eloquent witness of the great national "boom," as we should call it, that followed upon the Persian wars.

⁹⁴ Cf. Dörpfeld, Mitth. Athen, XII, p. 200.

⁹⁵ Cf. CURTIUS, Die Akropolis von Athen, pp. 7-8.

They must, above all things, erect to the honor of their guardian goddess, Athena Polias, a magnificent temple exceeding in grandeur anything that Hellas had ever known. And to the adequate fulfilment of this purpose the first necessity was to surround the whole Akropolis on the outermost edge of the rock with a mighty, massive wall, which should serve not merely as a wall of defense, but even more as a supporting wall for the mass of stone and earth that was to raise and level the whole citadel to a single great plateau sloping from the middle gradually down to the splendid portal at the lower, western end.96 In the execution of this plan the ruins of the older buildings destroyed by the Persians were turned to most excellent service. To utilize them for the new buildings was of course out of the question, for these were all to be of marble, while without exception all the pre-Persian buildings were of poros, having, at most, a few single architectural designs of marble. But for his great Akropolis wall Kimon made unlimited use of all sorts of fragments from the old dismantled temples -ashlar blocks, pieces of entablature, drums of columns, in short all sorts of old building material. It is also for the most part easily recognizable that in the employment of such material they endeavored not to have the old building material appear as such, but, by working off their former outlines, to make them look as much like the new squared building stone of the wall as possible.97 Such is the case, for example, with the thirteen poros drums from the colonnade of the Hekatompedon that are built into the south wall above the theatre and the Asklepieion; for their new purpose they were worked over into cubic blocks in such a way that only single flutings on the corners betray the end they originally served. On the other hand, however, when we find those architectural members of that same old Athena temple built, without the stroke of a chisel, into the north wall and in the most conspicuous spot about the whole Akropolis, we may be sure that some definite object, higher than the mere utilization of old material was aimed at by the builders. These portions of epistyle with the corresponding triglyphs, metopes, cornice, drums and capitals, were, as before remarked, carefully taken down and built into this wall in

⁹⁶ Cf. Dörpfeld, Mitth. Athen, XI, p. 165.

⁹⁷ Ibid.

precisely the same order and relative position that they had occupied on the old temple of the Polias; and since this is true, their present arrangement, or even their presence in the wall in their original form, is not due, as most people since Leake have thought, to the haste in which the wall was thrown together by Themistokles, but they were deliberately planned and carefully set up in the most conspicuous part of the wall on the north side of the Akropolis toward the city proper, to serve not only as an ornament to the wall, but also as an "eternal reminder to the people of the national hatred toward the Barbarians."

The manner and method on which they proceeded in the construction of this great retaining wall-for such the whole Kimonian wall is-and the filling which it was intended to support are clearly shown by the subjoined photographs (PL. XVI). builders did not first construct the wall to its full height and then fill in the triangular space behind it with earth and débris, but on technical grounds, to make the wall the stronger and save scaffolding besides, as soon as they had put up two or three courses of ashlar the space behind was filled up with stones of the greatest variety: many an old building stone which, on account of its irregular form, or because it had been too badly injured in the late catastrophe, could not be used in any of the new works, found a place here as filling. Converted to the same purpose we find mutilated statues, fractured pedestals, broken slabs containing inscriptions, and all sorts of other ruins that lay at hand upon the Akropolis. What else could they have done with such rubbish? A statue minus head or arms or legs was at that time as worthless as, for instance, a broken piece of cornice or a cracked drum from a column. Behind the Akropolis wall, accordingly, with the rest of the debris left by the Persians, that invaluable array of archaic statues has lain buried all these centuries, preserved against the destroying hand of time and of vandal, and awaiting resurrection in these latter days.

Such were the component parts of the first stratum of the filling material behind the new wall. Over this stratum of stones and fragments of every description they spread a layer of earth,

⁹⁸ BEULÉ, L'Acropole d'Athènes I, p. 97.

in order that the workmen in laying up the next course of the wall might have a better platform on which to stand, while at the same time the earth served to make both wall and filling more solid. And while the workmen hewed and trimmed the blocks of stone in the next course, this layer of earth itself in turn became covered with a thin stratum of splinters chipped from the poros blocks of which the wall is built.

The mass of filling piled inside and against the Kimonian wall consists, therefore, as may be clearly seen in the photographs (Pl. XVI), of a repeated succession of three distinct, approximately horizontal strata, composed by turns of 1) comparatively large pieces of stone, 2) earth, and 3) chips of poros. In many places also the old "Pelasgian" wall, lying inside Kimon's new wall, was covered up in the process of building and so itself also served as filling.

To make clear the relative position of the mass of débris used in grading up the Akropolis to the magnificent plateau as we know it, let me make use of Dr. Dörpfeld's illustration: "Let us compare the vertical section of the natural rock of the Akropolis with the vertical section of an ordinary gable-roofed house. The sides of

the house correspond to the steep sides of the Akropolis, and the oblique lines of the roof to the upper surface of the hill, gently sloping, as it originally did, from the middle toward the two sides [—thus: Now let us suppose the vertical walls of the house raised to the height of the ridge-pole [—thus: and we have what corresponds to Kimon's wall; fill in the two triangular spaces thus made, and we have the Akropolis as it was when the wall was finished."



The wall itself, which was probably not fully completed until Perikles' time, is in accordance with its designation as a revetment for the embankment behind it, very different in different places. Along the temenos of the Brauronian Artemis, for example, and adjoining it on the east, the live rock of the Akropolis extends on a level plane almost to the south wall, and this is true to a large extent on the north side as well; so that in these places there was no need of a retaining wall, for there was nothing

DÖRPFELD, Mitth. Athen, XI, pp. 166-7.

to fill up except a few fissures and crevices, and we find there, about the upper edge of the rock, an ornamental wall rather than a revetment. On the other hand, in front of the Parthenon, in the southeast corner of the Akropolis, the rock inclines rather steeply to the south and here a deposit of earth on a gigantic scale was found necessary. And as a matter of fact, the piles of earth and stone in this quarter were from ten to fourteen metres high. Commensurate with such a mass the wall, which, as far as it can be seen, is based immediately upon the rock, is not less than 15 to 16 metres high and 6.60 to 7.20 metres thick—capable of resisting an enormous pressure from the earth piled up within.

In this way the upper surface of the Akropolis was increased by about one-fifth its former size and assumed an essentially different appearances from that which it had presented before. In the course of this essay we have seen that ancient, rugged, chasm-rent rock filled up so as to present a series of little plateaus; we have seen it occupied by dwellings and smaller sanctuaries; we have discovered there a splendid royal palace and a gigantic, nine-gated fortress; in the age of the despots there arose a stately temple and probably other buildings; but with all this, the general form of the hill had been but little affected—a ridge above, sloping down to precipitous sides. But with the addition of Kimon's wall the whole appearance of the Akropolis is changed; it is now one great plateau, sloping only from the middle to the portal in the west.

What now, we next ask, did Kimon build upon the plateau thus obtained? First of all, as a memorial of the glorious struggle just past, this unwearying old Persian-fighter had Pheidias construct from the booty that fell into the hands of the Athenians at Marathon 100 the far-famed, colossal statue of Athena in bronze—the so-called Athena Promachos. The epithet Promachos, like Parthenos, is of comparatively late origin; earlier she is known as "the (large) bronze Athena" 101 or, "the Athena of

¹⁰⁰ Or with the Persian gold that the arch-traitor, Arthmios, brought with him to Hellas with which to Medise his fellow-countrymen. Cf. Dem. XIX, 271; DIN-ARCH, II, 24.

 $^{^{101}\,\}mathrm{Aristides}$ L, p. 408, 15. I; Paus. IX, 4, 1; Dem. XIX, 271; Ov. Ex Ponto, IV, 1, 31.

Marathon." 102 Unfortunately we can gain from ancient literature and art no exact knowledge with reference either to the location or to the pose of this famous statue. Regarding the first question, topographers have usually, and with probable correctness, identified as the basis of the Promachos'the large, rectangular pedestal, in part still preserved, about half way between the Propylaia and the old temple of Athena (PL. xv). The second question presents still greater difficulty; on this point the ancient authors are silent and the evidence of the few bronze coins in existence with representations of the Akropolis are utterly untrustworthy, for they present now a warrior-goddess with wildly brandished spear and uplifted shield, and again a peaceful goddess of the Parthenos type with spear and shield resting at her side and with a Nike on her hand. We are, therefore, left to our own devices to restore the monument. We know that the statue was colossal; this our sources tell us;108 but how high it was can never be told; we know only that without the pedestal its height was less than sixty feet. And it seems to me, in accordance with the data we have, most probable that the goddess stood armed, looking directly toward Salamis, where she had given her people the last assistance within their own territory against the barbarian hosts. In her right hand she held her lance, not brandished aloft, as many have supposed, but planted upright upon the ground beside her with the point projecting slightly above her helmet's crest. 104 Her shield also, which My., the famous engraver, about a generation later adorned with a Kentauromachia and other scenes 105 after drawings by Parrhasios, she supported with her left hand, while the lower rim rested upon the ground; held otherwise, the effect of this new ornamentation by Mys, which was certainly intended to be seen, would have been entirely lost.

The old fortifications on the west were, as we have already seen, as far as it was possible in the case of so massive a structure and with the means at their command, dismantled by the Per-

¹⁰² ARISTIDES XLVI, p. 218, 8 I.

¹⁰³ PAUS. 1, 28, 2; IX, 4, 1; PLIN. XXXIV, 54; DEM. XIX, 271.

¹⁰⁴ This seems to me to be stated by Paus. I, 28, 2, beyond the possibility of a misunderstanding.

¹⁰⁵ PAUS., loc. cit.

sians. It must, therefore, have been one of Kimon's first tasks to make the citadel as impregnable again as it had been before. And that the old gateway was not essentially changed, but only repaired and perhaps improved in outward appearance—of that we have sufficient proof in the remains. In the angle formed by the southwest wing with the middle hall of the Mnesiklean Propylaia is to be seen the main portion of what is left of the older gate-way (abc, on PL. xv). It was planned to be an integral part of the old "Pelasgic" fortifications; the corner (b) is built into the end of the upper wall of the Pelargikon; the southeast side of this older Propylaia (iab) was a solid wall of poros blocks faced with thin marble slabs, while the adjoining wall on the southwest ends in an anta of marble (c). Next to the anta, on the northwest, we see the beginning of a marble threshold, on the continuation of which presumably columns once stood. We should notice also that, conformably to its design as an organic part of the Pelargikon, the old Propylaia faces southwest, whereas the orientation of the Mnesiklean Propylaia is directly west. Corresponding to the façade in the southwest and on a line parallel with it, we find in the central doorway of the present building the natural rock cut in the form of steps (f) to receive the foundation stones of some building older than the Periklean Propylaia; this marks the line of a colonnade (ei) on the east front, like the one opposite on the west.

This older portal has often been called Kimon's Propylaia. It is, however, probably much older than Kimon and was merely repaired under his direction, like many another building left in ruins by the Persians. That it was in existence before his time is rendered probable, though not absolutely certain, by the manner of its destruction; for evident traces of fire here and there on ruins ¹⁰⁶ that have remained buried since the days of Perikles point almost beyond a question to the great conflagrations of 480 and 479 B. c. We may, therefore, safely conclude that the Akropolis from the beginning had a great gate at this spot, that the gateway which we have been considering had the same general outline, at least, as the one built by the "Pelasgians," that the marble decorations may have been added, perhaps, by Peisistratos

¹⁰⁶ Cf. Ross, Arch. Aufs. 1, pp. 78 and 79.

or his sons, who did so much to beautify their city, that it shared in the general havoc wrought by the barbarians and in the general repairing done by Themistokles and Kimon.

It was beyond the power of the Greeks of old to conceive of one only God, omnipotent, eternal, alone creating and governing the universe, and yet there was implanted in their souls such a longing for one god, that individually, in families and in tribes, they directed their worship not to the multitude of national divinities, 107 but to some one deity to whom κατ' έξοχήν they paid their homage and their vows and on whom they relied for help and support in success and defeat. And so each state had some one deity whom that state honored above all other gods and who stood nearer to it than to any other and nearer than any other god. As Hera was to Argos or Poseidon to Corinth, so Athena was to Athens. She had now once more saved her city and her people and given them new glories; and the first as well as the greatest and grandest of all Kimon's undertakings was the erection in her honor of a temple that should far surpass in size and in splendor the one that had been burned. Indeed, it was to be even larger as planned by Kimon than it proved to be as completed by Iktinos and Kallikrates. Kimon's workmen had begun, almost at the very beginning of his administration, even before 108

¹⁰⁷ Cf. Ernst Curtius, Die Akropolis von Athen, p. 6.

¹⁰⁸ The priority is certain on technical grounds; at a slight distance from the substructure of the Parthenon and nearly parallel to it, we find a wall of inferior construction (HJ, on PL. xv). The small interval between this wall and the temple was found by the excavators filled with alternating layers of the debris left by the Persians, and of poros chips made by the masons at work on the basis of the temple. Thus the purpose of this wall and the chronological relations existing between the different constructions in that quarter are made clear; the substructure of the Parthenon was built before the south wall of the Akropolis, with the ten to fourteen metres of grading behind it, was begun. The purpose of the wall HJ was to save the expense and the trouble of so much scaffolding as would have been required for the building of the base of the Parthenon on that side. And so they proceeded, just as in the construction of the wall about the citadel, first laying up one or two courses on the Parthenon, then bringing up their platform-the wall HJ with the filling between it and the temple-and then proceeding as before. When later the plan to raise the Akropolis to one great plateau was put into complete execution and the south wall was built, then this platform, wall and all, was covered up, along with the old "Pelasgic" wall and everything else that had outlived its usefulness.

From this two conclusions of much importance for the history of the Akropolis follow: (1) The foundations beneath the Parthenon were built after the Persian

the erection of the wall on the south side of the Akropolis, to construct the great platform on which was to stand the most magnificent temple that the world has ever seen. The foundations were all done; the great drums for the columns lay already half-finished on the grounds; but Kimon was fated never to finish the stately temple that he had brought thus far toward completion, for in the year 460 B. C., his ungrateful country at the instigation of Perikles sent him into exile from the native land which he had loved so well and for which he had done so much.

VIII.-THE AGE OF PERIKLES.

With this event, upon which Perikles became the recognized leader of the Athenian state, we enter upon the climax of a period unequalled in all antiquity and never outshone in the whole history of the world. We may say that during the forty-eight years from the calm that began in the autumn of 479 until the first great breakers of the Peloponnesian war dashed over proud Athens, the vastness and magnificence of the building projects executed under the leadership and direction of Themistokles, Kimon and Perikles have never since been equalled and scarcely approached.

By the side of the third and greatest of the three great statesmen stood his friend and co-equal, Pheidias, who superintended during his life at Athens the artistic execution of all the buildings of Perikles. The financial prosperity and the generous ambition of the state placed at his command most abundant means with which to consummate his magnificent plan for transforming the whole Akropolis into one sacred precinct for Athena.¹⁰⁰ "And so," in Plutarch's ¹¹⁰ enthusiastic words, "the works grew, all-surpassing in their magnitude, inimitable in their beauty and grace, as every workman vied with his fellow in substituting for

invasion and not by Peisistratos as, previous to the excavations, had always been supposed; and (2) The wall on the south side of the Akropolis was built after, but not long after the substructure of the Parthenon, for otherwise the wall HJ would not have been built at all. Cf. Dörffeld, Mitth. Athen, x, p. 275.

¹⁰⁰ Both Hdt. (e. g. VIII, 51-55) and Thuk. (e. g. I, 126) call the whole Akropolis $\tau \delta \ l(\epsilon) \rho \delta \nu$, and so does Ar. (Lys. 482-483).

110 Per. 13.

mere handiwork elegance of artistic execution; and still the most wonderful feature of all was the speed with which the work was completed. Those edifices, any one of which alone, one might think, would have required the work of many successive generations, were all (sic!) finished in the prime of one man's administration. Ease and speed of execution seldom tend to give a work lasting importance or exquisite beauty; while on the other hand, the time expended in the creation of a work is more than repaid in the endurance of the work done. And so we have even greater reason to wonder that the structures reared by Perikles should have been built in so short a time and yet have been built for ages; for as each of them, as soon as completed, was already ancient in its beauty, so, now they are old salmost five centuries. have elapsed since their erection], they are fresh and new as in their pristine glory. Time has left no stain upon them; a kind of newness sheds its bloom around them, preserving them untarnished by the ages, as if they were possessed of a spirit that can never fade and a soul that never grows old."

Under Kimon's administration every thing done seems to have borne some relation to the recent struggle for Hellenic liberty; under the direction of Perikles, on the other hand, the public works erected had an entirely different character: it was no longer the Athens that had borne the brunt of war and repulsed forever the Asiatic from the shores of Greece, but the Athens that stood blooming in the plenitude of peace and prosperity at the head of a mighty maritime confederation.

Perikles' first care was to complete the temple of the Polias, that had been begun by his old opponent Kimon; for the Parthenon also must henceforth be considered one of the temples of Athena Polias, and a seat of the cultus of the goddess as Polias. The truth of this statement is placed beyond all question by the following considerations:

(1) The decorations of the frieze cannot lack all ideal connection with the temple that it adorns. Now, the frieze of the Parthenon represents in its whole length a sacred procession given in honor of Athena Polias alone—the Panathenaia, the greatest festival of the Polias; in the very middle of the frieze, directly over the door of the temple, stands the priestess of Athena Polias her-

self." And in the cella of this temple the victors in those great games in honor of the Polias were crowned. All this points directly to none other than Athena Polias as the indweller of the Periklean Parthenon. And who else should be? For the Parthenon was certainly a temple with a cultus (the idea of "festal temples," primarily intended to be used in connection with the games and without a cultus, is a myth invented by a German conjecture); and as "Parthenos" was perhaps never, certainly not in early times, a cultus-name, to whom should we a priori more fittingly ascribe the largest and most beautiful temple of Athens than to the guardian goddess of the city herself? Still these four arguments, one a priori, two from the frieze—the priestess of the Polias in the most prominent position in it, and the representation of the games in honor of the Polias—and, as fourth argument, the fact that the victors in these games were crowned in the temple of the Polias,—all this renders the case only probable.

(2) Fortunately, however, we have more than the logic of probabilities; we can gather from the official names of the temples of Athena a direct and conclusive proof that the Parthenon was called "the temple of Athena Polias" (ὁ νεως της 'Αθηνάς της Πολιάδος). In official inscriptions the Hekatompedon is generally termed ὁ ἀρχαίος νεώς (the old temple); such a designation necessarily presupposes the existence of a newer temple, which might be called either ὁ καινός (the new) or ὁ μέγας νεώς (the great temple), or briefly ὁ νεώς (the temple). That this newer temple must be the Parthenon is doubted by no one. Furthermore, in one inscription (CIA. II. 464), also an official document, we find ό ἀρχαίος νεώς της 'Αθηνάς της Πολιάδος (the old temple of Athena Polias). "The old temple of Athena Polias" demands likewise, as a necessary presupposition, the existence of a "newer temple of Athena Polias," which again might be called ὁ καινός (the new), or ὁ μέγας (the great), or simply ὁ νεως της 'Αθηνάς της Πολιάδος (the temple of Athena Polias). Should we find one of these three names, with no closer designation of the temple referred to, we could be certain of one of two things: either the Parthenon would be meant, or else possibly the eastern cella of the

¹¹¹ MICHAELIS, Parth., p. 255.

Erechtheion. As a matter of fact, the name does occur, and more than once, in the inventories of the stewards of Athena (cf. CIA. II, 332; Mitth. Athen, VIII, p. 59); here again we have official documents, which we know for a certainty refer to treasures preserved in the opisthodomos of the Parthenon, and we have as its official name $\delta \nu \epsilon \omega \hat{s} \tau \hat{\eta} \hat{s} \Lambda \theta \eta \nu \hat{a} \hat{s}$ Πολιάδος (the temple of Athena Polias).

- (3) Again, it is on all sides granted that the Parthenon was built to supplace the Hekatompedon, which had been burned by the Persians. Now, the Hekatompedon was a temple of Athena Polias; its official name, as we have just seen, is ὁ ἀρχαῖος νεοὸς τῆς ᾿Αθηνᾶς τῆς Πολιάδος (the old temple of Athena Polias); and it needs no proof that the Erechtheion, which had only just been built, or was not yet even finished, could never be called ὁ ἀρχαῖος νεώς (the old temple). What sort of a temple, then, could take the old one's place other than a new temple of Athena Polias?
- (4) As a last argument, if further argument were needed, let me add that nearly all the votive offerings, the sacrificial vessels and all the sacred utensils used in the processions belonged to Athena Polias; Athena Parthenos, as far as we can see from the public records, did not possess a single votive offering nor a single obol in cash. How, then, could she lay claim to the largest and most splendid temple of the citadel? And, finally, even the so-called Parthenos of Pheidias is named, in the one inscription ¹¹³ that mentions the chryselephantine statue of the Akropolis, Athena Polias, and the name Parthenos, as applied to the statue, is of late origin.

The foregoing explanation makes clear the relation existing between the Hekatompedon and the Parthenon, both temples of Athena Polias. But still it remains for some keen-sighted scholar to discover the relation borne by these two temples to a third, the eastern cella of the Erechtheion—also without a doubt

¹¹² DÖRPFELD, Mitth. Athen, XII, p. 194.

¹¹³ Cf. Mitth, Athen, v. pp. 89 sq., and xv, pp. 430 sq., where the inscription is twice quoted.

a vews $\tau \eta s$ 'A $\theta \eta v u s$ $\tau \eta s$ Holudos (a temple of Athena Polias). Dörpfeld suggests the following as a solution of the problem: "When the stately marble temple [the Parthenon] was completed, the two old poros buildings [the Hekatompedon and the old Erechtheion] looked rather shabby beside the new splendor, and so it was resolved to replace both with a double sanctuary beneath one common roof—the new Erechtheion."

The fallacy in this hypothesis is evident: in the first place, one of these poros buildings had already been replaced by the Parthenon; why should it be replaced again and then still left standing? And in the second place, as was shown p. 478, Erechtheus and Athena had had a common temple under one roof from the beginning. And so we are no nearer the solution of the difficulty than we were before.

Only one other effort to throw light upon this question is known to me: Miss Jane Harrison 114 cuts the Gordian knot with the astounding statement that "The belief that the eastern half of the Erechtheion was called the cella of Athena rests, so far as I am aware, wholly upon the testimony of Pausanias. The image was simply one of many curiosities kept in the Erechtheion, and though it lived in the east cella, did not give that cella any particular name. The Erechtheion is, as Pausanias viewed it, a shrine of cults of more or less obsolete significance—a museum for the symbols of these cults. Viewed thus as a museum, etc." Even if Miss Harrison's surmise as to the source of the designation of the eastern cella of the Erechtheion as a shrine of the Polias were correct, still her conclusion would not follow. It was in the Erechtheion, as she grants, that Pausanias saw the old xoanon and the ever-burning lamp of Kallimachos; these two objects are repeatedly and distinctly mentioned by other ancient writers 115 besides Pausanias as being in the sanctuary of Athena. Moreover the existence of a temple common to Erechtheus and Athena is, beyond a possibility of a misinterpretation of their words, familiar to the ancient writers from Homer, 116 down through

¹¹⁴ Harrison and Verrall, Mythology and Monuments of Ancient Athens, pp. 508-9.

¹¹⁵ PLUT. Sulla, 13; STRAB. IX, p. 396; and others.

¹¹⁶ Iliad, 11, 546.

Æschines, 117 Aristeides, 118 Plutarch, 119 Pausanias 120 and Strabo, 121 to Harpokration, 122 Hesychios, 123 Himerios, 124 Philochoros 125 and Eustathios, 126 And finally Miss Harrison upsets her own theory by taking out of her "Museum" nearly all the curiosities that "Pausanias viewed there" and putting them into the opisthodomos of the Hekatompedon, and concludes her whole discussion by implying, if not declaring outright, that the Erechtheion was at one time the temple of Athena Polias: "The Erechtheion," she says, "is a museum; it no longer strives to keep its head above the water as the original Athene temple, but sinks with a sense of relief into dignified, because natural subordination." Did important cultus-temples in antiquity naturally sink into mere museums? I leave the unbiased reader to judge.

The question I have raised remains, therefore, unanswered. The relationship existing between the Erechtheion and the Hekatompedon and Parthenon has not yet been discovered and perhaps never will be. Perhaps there was none. It may be that the Polias was worshipped in two or even three shrines independent of one another.

The Parthenon, however, to resume our narrative, is only a part, though the most important part, of the magnificent plan of Perikles and his "table round" for making of the Akropolis one great votive offering for Athena. But scarcely had the Parthenon been dedicated (438 B. C.)—and it was even then not yet entirely completed—when Pheidias was compelled to leave Athens. Nevertheless, the building enterprises of the city went on without interruption; for Perikles' great plan was as yet far from being realized. In the very next year after his departure, Mnesikles began, under the direction of Perikles, to build the imposing portal, which was to prove one of the principal wonders of the Akropolis. And still the citadel was no less a mighty fortress than before.

Five years was the Propylaia in building; in that time the

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117 11, 147. 118 XIII, p. 107, 6. (III, p. 62, ed. Dind).
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¹²¹ IX, p. 396.

¹²² S. v. Βούτης. 123 S. v. οἰκουρὸν δφιν. 126 Ecl. 5, 30. 125 ad Od. 1, 356.

¹⁹⁶ Frag. 146 ap DIONYS HAL. de Div. 13.

original plans of the architect had to suffer many changes, in and even so, before the structure had received the finishing touches, the Peloponnesian war broke out and the work was suspended never again to be resumed.

And now came the turn of the old poros Erechtheion to be rebuilt; and so some time after the dedication of the Parthenon, work was begun upon the most elegant and unique building of antiquity. After many interruptions this last architectural monument of the glory of Periklean Athens was finally completed in the later years of the Peloponnesian War. In the years of storm and stress, 413–411, all work was necessarily abandoned; but as soon as relief came, as it did through the victories of Alkibiades at Kyzikos in 410, work was at once resumed upon the neglected building; a new commission was appointed, whose first business was to take a complete inventory of the condition of the building. In a similar inventory of the following year we find the work on the frieze progressing rapidly, and in the next year (408–407) the temple was probably finished.

Of the older Erechtheion nothing, of course, is left; the old μαρτύρια—the salt spring and the marks of the trident—could not be moved into a new temple, and therefore the old building to the last stone must yield and give place to the new one.

A glance at the plan reveals a curious phenomenon with respect to the Erechtheion; the porch of the Korai is built directly upon the stylobate of the old Hekatompedon; the columns of the temple had long ago been built into the Akropolis wall or otherwise disposed of. Those six exquisite Attic maidens who support the roof are thus made to face squarely against a limestone wall at least twice as high as their heads and almost within arm's length. Such a crying outrage could have been committed by the builders only with the intention and in the sure expectation that the old temple would soon disappear. But did it? In the year 409–408 the Erechtheion was still uncompleted, but it must have been finished soon after that. "In 406–405," says Xenophon (Hel. I, 6, 1), "δ παλαιὸς τῆς 'Αθηνᾶς νεώς ἐν 'Αθήναις ἐνεπρήσθη (the old

¹³⁷ We owe the reconstruction of the Propylaia after the original plans of Mnesikles to the brilliant genius of Dörpfeld. The high-water mark of research in the realm of ancient architecture is reached in his two essays in the *Mittheilungen Athen*, X. pp. \$8 sq. and 131 sq. temple of Athena at Athens was burned); ¹²⁸ and in spite of the troubles that followed with the loss of all her power, Athens again, in 395–394, repaired the beloved old temple. ¹²⁹ Xenophon's words used always to be interpreted as referring to the Erechtheion; but that Xenophon should have called a temple less than two years old, and perhaps not even dedicated as yet, a παλαιὸς νεωὸς (an old temple), is quite incredible.

And still for many years after the fire the old temple continued in use. We find again in an official record (CIA. II, 758): τάδε ἐκ τοῦ ἀρχαίου νεω παρέδωκεν ἡ ἰερεία τοῖς ἐπιστάταις τοῖς ἐπὶ Θουδήμου ἄρχουτος εἰς τὸυ Παρθευῶνα—a list of articles transferred from the ancient temple to the Parthenon in the archonship of Thoudemos 358 (or 354) B. c. With this all official mention of the Hekatompedon ceases.

But how long it still stood can never be precisely known. The Akropolis suffered no violence for centuries afterward, and the present condition of the ruins betokens a late and a gradual disappearance of the building. Pausanias and Plutarch both saw it, and it is altogether possible, if not probable, that it was pulled down like many another building in Byzantine times for building over the Parthenon, Erechtheion, etc., into Christian churches.¹³⁰

But there is no occasion for tarrying over the temples of the age of Perikles. And with such books as Lloyd's Age of Perikles, Adolf Schmidt's Das Perikleische Zeitalter, Michaelis' Der Parthenon, Hertzberg's Athen, Penrose's Principles of Athenian Architecture, and Ernst Curtius' brief but admirably written and delightfully entertaining dissertation Die Akropolis von Athen—with such books as these at every reader's command, a brief and inadequate account of the creations of the days of Athens' glory, such as I might give, would be worse than superfluous. As has been observed in the preface, the picture presented by the Athenian Akropolis in the days that immediately followed Perikles is so

¹³⁸ It may very well have been set on fire by the priests belonging to the new temple, who were, of course, as anxious to get it out of the way as those of the old temple were to save it. Anyway, the former seem to have been tried on the charge of arson; cf. Dem. XXIV, 136: και οι ταμίαι ἐψ΄ ὧν ὁ ὁπισθόδομος ἐνεπρήσθη και οι τῆς θεοῦ καὶ οι τῶν ἄλλων θεῶν ἐν τῷ οἰκήματι τούτψ ἦσαν ἔως κρίσις αὐτοῖς ἐγένετο.

¹³⁹ Inscription published by Ulrich Köhler in Hermes 11, p. 21.

¹⁹⁰ Cf. Dörpfeld, Mitth. Athen, XII, pp. 60-61.

fully and definitely known, from the buildings preserved and from literature, that differences of opinion concerning it are possible on minor points only. New discoveries and more penetrating investigations of the monuments we have can make no essential changes in that picture. It is for these reasons that I pass the age of Perikles by, picking up only such fibres as are needed to spin the thread of history.

When Kimon's wall was finished, the Promachos unveiled, the Parthenon dedicated, the Propylaia with the temple of Athena Nike erected, and the Erechtheion rebuilt,—then the Akropolis was essentially complete; and notwithstanding all that the later Greeks and Romans built upon and about it, the Akropolis had years before received everything that gave to it its historical character and its influence upon the world to come. It stood there then, rising grandly above the busy city of commerce and trade in the midst of which it stood, the colossal pedestal of the temples, with all its parts working harmoniously together to one sublime work of art, at last one great and worthy sanctuary to the daughter of Zeus.

In these days also came to the Akropolis a vast number of votive offerings and dedications of every description, brought to the precinct of the goddess on any and every occasion, by individuals and by the State. Of votive offerings on the part of the State, Pausanias mentions several: the Athena Lemnia of Pheidias himself, as well as his (?) Apollo Parnopios, the Hekate Epipyrgidia of his pupil Alkamenes, the Sosandra of Kalamis, the Athena Hygieia of Pyrrhos, Myron's cow, etc.

We have but a very meagre account indeed of these great public donations; and since such is the case with them, how wholly unable must we be to form any correct conception of the overflowing abundance of the offerings that came from private sources to fill the sacred precinct.

IX.-THE PELOPONNESIAN WAR.

The breaking out of the calamitous war with Sparta, draining Athens of her money as well as of the flower of her manhood, was still not enough to put an end to the architectural and plastic adornment of her citadel. In the various shorter or longer inter-

vals of peace the work went on, though it was greatly limited in extent. So, for example, the rebuilding of the Erechtheion especially was continued and completed before the war was entirely over. Besides this, the Akropolis received even during the war many an additional ornament, in the way of offerings of statuary, not only from private individuals, but from the State also. For example, in honor of the victory at Sphakteria a bronze Victory was dedicated and set up upon the citadel,131 and Nikias, as a token of gratitude for his victories, consecrated to the goddess a gilded Palladion. 132 The decoration by Mys of the shield of the so-called Promachos, already described, was also made at about this time—a further recognition of the goddess's protecting care. It was, furthermore, not long before 414 133 that, by the generosity of Chaeredemos, the Trojan Horse of Strongylion was set up in his place, and that Alkibiades hung up his two Nemean pictures in the Pinakotheke.134

But important above all the portraits placed upon the Akropolis in that day is the one of Perikles by Kresilas, familiar to every student through the copies that have come down to us. ¹³⁵

And, finally, let us not neglect at least to mention that even in those troublous times Athens did not forget the gods, but at no little sacrifice consecrated new cultus statues, a Zeus Polieus, for example, and an Artemis Brauronia of gold and ivory (?)—the former a creation of Leochares, ¹³⁶ the latter of Praxiteles ¹³⁷ (probably the elder). Both these new statues, be it noted, were placed beside the old ones, which were, indeed, inartistic enough, but at

¹³¹ PAUS. IV, 36, 6.

¹²⁹ In Plutarch's day the plating had become worn off. Cf. PLUT. Nic. 3: Έστήκει δὲ καὶ τῶν ἀναθημάτων αὐτοῦ καθ' ἡμᾶς τό τε Παλλάδιον ἐν Ακροπόλει, τ ἡ ν χρύσωσιν ἀποβεβληκός.

¹⁸³ For Aristophanes in the Birds (brought out in 414), vs. 1128, alludes to it. Cf. also Paus. I, 23, 8; Löwy, Inschriften Griechischer Bildhauer, No. 52; CIA. I, 406.

¹³⁴ PAUS. I, 22, 7; PLUT., Alc. 16; SATTROS ap. ATHEN. XII, p. 584, D.

¹⁹⁵ OVERBECK, SQ. 873.

¹³⁶ PAUS. I, 24, 4.

IN PAUS. I, 23, 7; cf. also FRIEDRICHS, Praxiteles und die Niobegruppe; STUD-NICZKA, Vermuthungen zur Kunstgesch., p. 18, and Zeitschr. f. Oestr. Gymn. 1886, p. 686; SCHREIBER, Berl. Philol. Wochenschr. 1885, No. 19; ROBERT, Archaeol. Mährchen.

the same time so hallowed with age that no new ones could ever take their place. In short, the Akropolis continued to be the centre of interest for art and architecture even during that long exhausting war, and to receive in ever increasing numbers these peculiar gifts of the Athenian people.

We are standing now upon the border of Athenian independence. With the humiliating reverses of the years 405–403 and the rule of the Thirty Tyrants, had departed, as far as might then be, the old glory of Athens. But before we cross that border, let us consider two buildings, of which the one can be dated only

approximately, the other not at all.

- (1) Upon the first terrace to the right, as one passes through the Propylaia, Pausanias saw the sanctuary of the Brauronian Artemis (see PL. XV.), and within it the chryselephantine (?) statue made by Praxiteles; there stood also within this shrine a work of Myron's—a χαλκοῦς παῖς (a bronze boy), holding the basin containing the holy water.100 We have not the faintest suggestion from antiquity as to when this temple was erected. We can form no notion in regard to its appearance; for not only are the ancient authors silent on this point, but, furthermore, not a single trace of such a temple could be found in the last excavations. Foundations, indeed, were found—two porticoes (see PL. XV.), the one along the southern, the other along the eastern boundary of the Brauronian terrace, the two meeting at right angles at the southeast corner. The temple itself-if there ever really was one, and there must necessarily have been one if Praxiteles' templestatue was indeed of gold and ivory-must have been completely obliterated by the Venetians when they shifted the road leading to the Akropolis, so that it passed around the south side of the Propylaia.139
- (2) Many scholars have long clung with unyielding tenacity to the idea that there was a temple of Athena Ergane upon the next terrace to the east, between the Brauronian terrace and the Parthenon (see Pl. xv.); but in the light of the last excavations this idea must be given up without reserve; for in the course of the last few years it has grown clearer and clearer that there never was

¹³⁸ PAUS. 1, 23, 7.

¹³⁰ Cf. Dörpfeld, Mitth. Athen, XII, p. 117.

upon the Akropolis of Athens a specific temple of Athena as Ergane. Not only was not the faintest trace of such a temple discovered there, but we find instead another building which covers considerably more than half of the whole terrace, and is obviously the long-sought Chalkotheke (see PL. XV.); for its shape and arrangement forbid that it should have been a temple or anything but a great magazine. It is one of the largest edifices on the Akropolis-41 metres long, and including the porch, which is about 3.50 metres deep, 18.50 metres wide. It consists, furthermore, of only a single great hall, the south wall of which is the Akropolis wall itself. It is of somewhat later date than the Parthenon; for the rock-cut steps (KL) between the two buildings were made contemporaneously with the Parthenon, and are manifestly older than the Chalkotheke, inasmuch as they extend clear to the Akropolis wall. Much hard work for nothing would certainly have been spared, had not the stairs been constructed earlier than the magazine; for the triangle between the Chalkotheke and the end of the stairs was useless, and had to be filled up, thus covering that part of the stairs completely. The Parthenon is, therefore, older than the Chalkotheke, but not much older. The proof of this is found in the building-material in the foundations: the buildings of the v century B. c. are uniformly supported by substructions of Peiraieus stone, those of the IV and III centuries by substructions of breccia. Inasmuch, therefore, as Peiraieus stone was still employed for the Chalkotheke, its erection will fall at the end of the v or the beginning of the IV century B. C.; this, furthermore, is in complete harmony with the official records, where the first mention of the Chalkotheke is made in the year 358 (or 354).140

The next question is, what was kept in this immense magazine? The inventories of the stewards (ταμίαι) reveal the fact that its contents consisted of chairs, couches, cups, crowns, shields, greaves, etc., etc. One inscription ¹⁴¹ mentions 1500 Lakonian shields; another ¹⁴² bears record of 43,300 objects of one kind—the name is lost—and of a considerable number of various engines

¹⁴⁰ DÖRPFELD, Mitth. Athen, XIV, p. 311.

¹⁴¹ CIA. 11, 678.

¹⁴² CIA. 11, 733.

of war besides; so there must have been a great array of weapons of every sort stowed away in the building. All this wealth belonged to the iερὰ χρήματα τῆς 'Αθηνᾶς ¹⁴⁵ (the sacred treasures of Athena), and was under the supervision of the same stewards as the possessions of the goddess in the opisthodomos of the Parthenon. The inventories of both localities were sometimes even inscribed upon the same slab. It therefore proves to be, as Michaelis long ago conjectured, ¹⁴⁵ a "dependency" of the Parthenon, to receive things that could not find lodgment in the temple; and now we find that both magazines—opisthodomos and Chalkotheke—so closely connected in purpose, are also outwardly immediately united by means of the wide flight of stairs between them.

X.-THE AKROPOLIS IN HELLENISTIC TIMES.

From the close of the Peloponnesian War down to Herodes Attikos, there were but two men whose names have been rendered immortal by their connection with great building projects in and about Athens-Lykourgos and Philon; and their activity, though epoch-making in Athenian history, was confined exclusively to the lower city and to the suburbs, Peiraieus and Eleusis. Lykourgos, indeed, by his exceptional management as minister of finance, was able to find the means for dedicating new templefurniture to Athena-golden Victories, new appliances of gold and silver for the processions, and so forth. So during the whole course of the IV century the Akropolis seems to have been the recipient of countless offerings bestowed in gratitude for honors received. Among these gifts the votive reliefs that were then becoming so popular were especially numerous; the offerings were for the most part small, for now the means of the people were small. But in addition to the reliefs, portraits in marble began to multiply. Beside the Perikles of Kresilas, soon stood those of the brave Iphikrates (371 B. c.), and other Athenians who had rendered their country especially great services. Konon, the hero of the sea, was the first Athenian since Harmodios and Aris-

¹⁴³ CIA. 11, 61.

¹⁴⁴ DÖRPFELD, Mitth. Athen, XIV. p. 311.

¹⁴⁵ Parth., p. 306.

togeiton to whom during life the honor of having his portraitstatue erected upon the citadel was accorded by the State; and
on the same pedestal with his stood also the statue of his heroic
son, Timotheos. And still the different kinds of decoration
at this time placed upon the Akropolis have not been exhausted.
After his victory at the Granikos (334), Alexander sent from the
booty, as a gift to the goddess who had once suffered so severely
at the hands of the Persians, 300 full suits of Persian mail, from
which twenty-six shields were selected and arranged upon the
architrave of the Parthenon. 147

It was not until this period that the Akropolis was again desecrated, this time by the wild excesses of Demetrios Phalereus, who went so far as to take up his abode in the Parthenon (304). And this disgrace was searcely past when the inhuman Lachares seized the Akropolis and appropriated to himself everything of value that he could use. But he was soon expelled, and happily, in his precipitous flight from Athens, he found it necessary, so the story goes, to leave the most of his plunder behind; among this was even the golden garment of the Parthenos (sic!), which he is said to have stolen.

In this period we must think of the Akropolis, however much it may offend our æsthetic taste, as an almost incredible forest of statues. In a single year no less than 360 statues of Demetrios were erected, of which a goodly number were probably upon the citadel. Nearly all that was added to Athens in these years and those to follow, the city owed to the favor of foreign benefactors. We head the list with such names as Ptolemy Philadelphos and King Attalos I: from the latter came as a votive offering the series of plastic groups in the southeast corner of the Akropolis, continuing the thought embodied in the metopes of the Parthenon; the Gigantomachia, the victory of the Athenians over the Amazons, the rout of the Persians by the Athenians at Marathon, and, as

¹⁶⁶ Paus. 1, 24, 3; the inscription is still preserved CIA. II: Κόνων Τιμοθ(έ)ου, Τιμόθεος Κόνω(νος); cf. ΜΙCHAELIS, Mitth. Athen I, p. 298.

¹⁴⁷ The inscription that explained the dedication ran: 'Αλέξανδρος Φιλίππου καl ol 'Έλληνες πλην Λακεδαιμονίων dπό των βαρβάρων των την Ασίαν κατοικούντων. Cf. Arb. An. 1, 16, 7; Plut. Alex. 16; Michaelis, Parth., pp. 42-3.

¹⁴⁸ Later they all disappeared with the exception of a single one, and that one remained upon the Akropolis. Cf. Diog. LAERT. v, 76-77.

the last link in the chain of Hellenic glory, Attalos' own victory over the Gauls in 229. Then came Eumenes II, Attalos II, Antiochos IV (Epiphanes) and Antigonos, whose names scarcely need to be mentioned as lovers and benefactors of Athens.

When all this is considered, it ceases to be a matter for any wonder that Pausanias mentions so few of all those portraits statues, votive offerings, etc., or that Polemon, even in that early day, already found material for four and Heliodoros for fifteen books concerning the Akropolis with its votive offerings. And soon the open space about the temples no longer sufficed for the gifts that were brought, and the very steps of the temples were occupied by statues and reliefs; and there, beside representations of a religious or mythological character, stood even portrait-statues as well, where they have left their traces unto this day.

XI.-THE AKROPOLIS IN ROMAN TIMES.

From Sulla to Hadrian there was little done in the way of public building or improvement in Athens, but there was also, happily, little injury done to what was there before. While the treasures of art in Corinth were taken without mercy and carried off to Rome, and the buildings of the city ruthlessly destroyed, the conquering Roman showed, generally speaking, great respect for the intellectual greatness and artistic significance of Athens and spared the public monuments. Even Sulla, when in the First Mithradatic War he had stormed the city, flooded her streets with blood and threatened her with utter annihilation, even Sulla allowed himself to be dissuaded by Roman senators and friends of Rome from carrying out his dreadful threat. And though his lieutenant, Gaius Scribonius Curio, blockaded the Athenian tyrant, Aristion, within the ancient fortress-for a fortress it still was, and a powerful one,-and finally by starving the garrison out got possession of the citadel, still the buildings upon the sacred rock and in the city proper remained untouched, at least by Roman hands. Not so, however, the Peiraieus. worst that Sulla did after the surrender of Aristion was to appropriate to his own use some fifty pounds of gold and 600 pounds of silver that he found in the opisthodomos of the Parthenon.

Nothing definite can be said in regard to the changes that took place upon the Akropolis in the stormy times from Sulla to the founding of the empire. Mad Antonius came and succeeded in wedding Athena (with a wedding present of 1,000,000 drachmæ from the still madder Athenians), and in having himself installed and worshipped as a new Dionysos, with Cleopatra as a new goddess of the citadel. Still such folly did no harm, and the Akropolis continued down to the vast and systematic art-robberies of Nero exempt from any serious losses.

Not only did the Romans spare the treasures of that holy hill, but they also now began to vie with other philhellenic foreigners in the effort to augment that splendid inheritance of the past by further offerings of their own. And then not only Akropolis, but city proper as well, became fairly crowded with honorary statues to Roman governors, practors, and other Romans of quality who had in any wise shewn favor to the city. Among such monuments the equestrian statue of Octavian's great engineer, Agrippa, might especially be mentioned. It was erected about 27 B. c., and stood upon a pedestal 16.75 metres high, which still exists almost intact at the entrance of the Propylaia, and directly in front of the anta of the Pinakotheke 149 (see Pl. XV).

In the first decades of the empire the demand for honorary statues became so great that the means at the city's disposal were far from sufficient to meet it. What was to be done? The Athenian people, to satisfy their Roman patrons, had recourse to the contemptible expedient of taking the statues of their fathers and of their gods and making them serve a new end. A new inscription upon the old bases usually sufficed to transform a god or hero into an imperial Roman. But when this new christening failed to satisfy, then the heads of those perfect creations of a century long past must come off and make way for the portraits of the scions of proud Rome.

The most remarkable innovation upon the Akropolis, in imperial times, was the erection of a temple to Roma-Augustus. A

¹⁴⁹ The distance between pedestal and anta is not more than 1.50 metres.

¹⁵⁰ Cf. SIEBELIS, ad. PAUS. 1, 2, 4.

Roma cult 151 had existed in Athens for a century before the building of the temple, which probably took place about 15 B. c. It stood, as the excavations of 1887 disclosed, square in the axis of the Parthenon, and at a distance from it of only twenty-three metres to the east (see plan). Structural pieces of the building (among them the part of the architrave that bears the dedicatory inscription) 152 lie close by and have long been known. These portions of the upper part, together with the recently discovered foundations, are sufficient to give us a pretty fair idea how the temple must have looked: it was, we observe, a circular building of white marble, surrounded by a colonnade of nine Ionic columns, 153 and similar to the Philippeion at Olympia, but much smaller; the diameter of the stylobate of the Roma temple measures only seven metres, while that of the Philippeion measures a very little more than twice as much; the number of columns also is exactly twice the number encircling the temple of Roma-Augustus.

Thus we find the Roman Empire and the Roman Emperor received into the sacred circle of the deities of the Akropolis; and as their temple stood exactly in the angle between the great temple and the great altar of Athena ¹⁵⁴ (see PL. XV), the sacrifices offered to the Polias must at the same time also have been shared by Rome and the founder of the empire. The Panathenaica also belonged no longer exclusively to Athena, but was combined with the festival of the emperor; and so in everything, from that day on, Roma-Augustus appear upon the Akropolis as recognized rival of Athena Polias.

151 As a reward for her assistance in the Third Macedonian War, the Roman Senate had restored to Athens Haliartos, Delos and Lemnos. Delos especially was a valuable possession to the Athenians, and in recognition of their obligation to Rome, the Roma cult was instituted. The first unquestionable mention of an lepot Ψώμη occurs about 100 B. c. The temple to Roma might have been erected then, but Athens was in those years too poor, so that the entire fulfilment of their obligations was postponed until the latter part of the first century before our era. Cf. Wachsmuth, Stadt Athen. 1, p. 641, note 1.

152 The inscription (CIG. I, 478) reads: 'Ο δήμος θεξ 'Ρώμη καὶ Σεβάστφ Καίσαρι στρατηγούντος ἐπὶ τοὺς ὁπλίτας Παμμένους τοῦ Ζήνωνος Μαραθονίου, Ιερέως θεᾶς 'Ρώμης καὶ Σεβάστου Σωτήρος ἐπ' ᾿Λκροπόλει, ἐπὶ Ιερείας ᾿Αθηνᾶς Πολιάδος Μεγίστης τῆς ᾿Λσκληπιάδου ὁλλαιέως θυγατρός, ἐπὶ ἀρχοντος ᾿Αρήου τοῦ [Δ]ωρίωνος Παιανιέως.

¹⁵³ Cf. Dörpfeld, Mitth. Athen, XIV, p. 264.

¹⁵⁴ See p. 493.

Peculiar in its kind, at least in Greece, as well as in its splendor, as was the great marble staircase leading from the so called gate of Beulé 155 up to the Propvlaia, still there is not a single trustworthy allusion in ancient literature from which we can infer, even approximately, the date of its construction. It is a matter for no surprise, therefore, that every possible variety of dates has been assigned to it, from Perikles down to Augustus, 156 and even to Nerio, 187 Duke of Athens, in the xv century. The spade, I think, has solved this much disputed question also. At any rate, it might have been clear before to the careful observer that the stairs were not built until after the erection of the monument of Agrippa, for the latter does not face the stairway, as it certainly would have done had it been set up subsequently to the building But in clearing up the space about Beulé's gate, it appeared that the towers that flanked the gate must have been built contemporaneously with the staircase; for both the courses of the buttress-walls that inclose the flight of stairs, and also those of the substructure beneath the steps themselves, are carried over into the horizontal courses of the towers. 138 For the towers, moreover, we already had from inscriptions 159 an approximate datethe first half of the first century of our era. Towers and stairway, however, are evidently older than Beule's gate, and the older

¹⁵⁵ Beulé, who conducted the excavations made by the French government, discovered the gate in 1852, and from him it received its name.

¹⁵⁸ Wachsmuth, Stadt Athen, I, p. 674: "It was perhaps under Augustus, and at his expense, that the colossal staircase was built. And yet," he cautiously adds, "it may owe its origin to one of the later Athens-loving emperors." Bohx, Propyläen, thinks "the destruction of the Mnesiklean approach must have begun with Sulla, so that thus 100 years later a new flight of stairs became necessary." Accordingly he assigns the year 38 A. D. as a probable date for its construction.

¹⁵⁷ BURNOUF, La Ville et l'Acropole d'Athènes, p. 87: "La porte découverte par ce savant (Beulé) n'existait pas au temps de Nério" (xv century), and the reason he ascribes for this view is that the staircase lacks the character of ancient workmanship: the joinings are not exact, and there is a marked difference between this and the real Hellenic works upon the citadel.

¹⁵⁸ DÖRPFELD, Mitth. Athen, XIV, p. 120.

^{159 (1)} The dedicatory inscription (Leake, Topogr. of Ath. 1, p. 306, note 1): Φλ. Σεπτίμιος Μαρκελλεῖνος Φλαμ[ἡν] καὶ ἀπὸ ἀγωνοθετῶν, ἐκ τῶν ἰδίων, τοὺς πυλῶνας τῷ πόλει (i. e. ᾿Ακροπόλει). But Leake is in error in assigning the inscription to the beginning of the 11 century; it is, like the next, a product of the first. (2) The "gate-keepers" inscription with reference to the building of the stairway (Ross, Demen του Attika, p. 36): ἐψ΄ ὧν καὶ τὸ ἔργον τῆς ἀναβάσεως ἐγένετο.

threshold between the towers lay more than three feet higher than Beulé's. We know that this must be so for three reasons:

(1) For a distance of three feet above the present threshold (Beulé's) the ashlar of the towers is left rough and unfinished; it was not intended to be seen. (2) Inside the gate the towers extended further inward, as the still existing foundations abundantly attest; and (3) the last four or five steps at the bottom of the flight are steeper than the rest and of different construction. These last four or five steps, then, were changed to suit the new gate, which, for some reason or other, was made to swing upon a threshold set a little deeper than the older one had been. Beulé's gate is, therefore, a later and probably stronger substitute for a gate that had been there before.

The next question is: when was the innovation of the Porte Beulé made? This also can now be established with comparative precision; for, as has long been known, the gate is built, in part at least, out of the choragic monument of Nikias. Now, if this latter originally stood at the northeast arc of the Odeion of Regilla (fig. 1), as Dörpfeld has all but proved, it was demonstrably pulled down when the Odeion was building. The foundations of the monument as undoubtedly found their way into the substructure of the Odeion, as the architrave with the inscription, the triglyphs and metopes found their way into the upper part of the gate, where they have remained unto this day. The theatre built by Herodes in honor of his wife, Regilla, was erected, as we know, between 160 100 and 177 A. D., 101 and the guidemarks of the architect of the gateway upon the cornice-pieces, to indicate the order of their succession in building, 162 as well as the architectural style of the whole gateway and the inscriptions built into it—all of them earlier than Herodes Attikos—point to the same date.163

With the foregoing demonstration we have won for the history of the Akropolis two facts of no little importance: (1) That the staircase from the hexastyle of the Propylaia down to Beulé's gate was formed, as it were, in one mould with the towers beside the gate, in the first half of the I century A. D.; and (2) that even the builders of the great flight of stairs did not as yet

The year of Regilla's death.
 Dörffeld, Mitth. Athen, XIV, pp. 63, sq.
 163 Ibid.

dare to leave the citadel unfortified, but felt themselves forced to surround their splendid stairway with wall and towers. The erection of Beulé's gate later on was simply to strengthen the old gateway in the defensory wall already there. The conclusion is unavoidable: even down into the times of the Roman Empire (until the last half of the II century A. D.), the Akropolis remained a great fortress, with a strong defensory wall.¹⁶⁴

With the building of the stairway the appearance of the court in front of the Propylaia was completely changed. The old winding road had disappeared, and the method of approach was now two-fold: that which was exclusively for foot-passengers led through Beulé's gate, and thence up the stairs. The stairway itself is divided into two sections by a landing that extends clear across the middle of the flight. Below the landing the flyers extended uninterruptedly across the whole breadth of the Akropolis; above they were broken into two parallel flights by the second method of approach, the road for horses and sacrificial animals, which came in directly from the south, through the entrance used until a few years ago, past the Nike bastion, passing then between the parallel flights of steps, and so through the central door of the Propylaia to the Akropolis itself.

In the course of this period Nero had come and carried away many of the priceless treasures of the Akropolis of Athens for the adornment of the Rome that was then rising from the ashes of his great bonfire. He had reduced art-robbery to a science and practised it extensively; and it was under his rule that Athens first suffered severe loss in works of art. But though Myron's cow and many other gems of the classical period wandered off to Rome to please the emperor, Athens still retained the most of her art treasures.

But Hadrian soon followed Nero, and with him came a revivification of art in Athens. "His coming," says Michaelis, "was a last bright ray of sunshine before the closing in of a dark and cheerless night." What Perikles had been to the Akropolis, Hadrian was to the city proper. But his monumental buildings and splendid works were confined to the lower city, and so we may pass him by.

¹⁴⁴ Ibid.

¹⁶³ Bohn, Propyläen, p. 35.

Hadrian's example inspired a younger contemporary, Herodes Attikos, a great scholar and the possessor of almost unlimited means, to turn his favor to the university city. But, like his predecessor, he spent millions upon millions upon the lower city, while the Akropolis fortunately received nothing but a few statues in his honor.

In the later imperial times the increase in the number of architectural ornaments in Athens was very insignificant. But with statues of bronze and marble, Athens was filled as never before. With the last of the Antonines architectural activity in Athens ceases entirely. From now on the whole glory of Athens was her past. We have now to trace the destruction and disappearance of the beauty and splendor lent to the Akropolis by the preceding centuries.

At the close of the IV century, ¹⁰⁶ the Goths under Alaric pushed into Greece and overran the country; but, in spite of all the disasters that overtook Attika at their hands, the glories of the Akropolis—the Parthenon and the Parthenos, the Promachos, the Erechtheion, and the Propylaia—still shone in all their pristine splendor. But with the changed attitude of the emperors toward heathendom, Athens was doomed to decline and decay.

XII.-THE AKROPOLIS IN BYZANTINE TIMES.

The Emperor Constantine the Great (314–353) was the first to spread Christian influence over all the Hellenic world with imperial power, and yet neither he nor his two great successors, Constantios II (353–361) and Julian (361–381), laid a destroying hand upon the art or architecture of Athens. On the contrary, all three were ardent friends of the city, and some of Constantine's officers, especially Cerbonius, spent large sums of money to repair damage that had been done either by the Goths or by the earthquake of 348.

But when Theodosios II (408-450) came to the throne, the Athenian horizon grew suddenly darker. The ancient paintings in the Stoa Poikile, executed by Polygnotos, and representing the glorious deeds of ancestral days, were the first objects to attract the envy and cupidity of the young emperor. About 430 the

¹⁶⁸ Alaric passed Thermopylæ in 395.

Parthenos is mentioned for the last time; 167 and she probably disappeared soon after that date from the sacred shrine that for nine centuries she had guarded. In the v century the Christian Church at Athens, which had hitherto been very weak, seemed suddenly to rise in power and influence; and this probably made it easier for Theodosios II to carry out his wishes. Throughout his reign Athens was continually plundered to enrich Constantinople. Up to this time it had been exceptional for an ancient temple to be transformed into a church, and so it remains almost a matter of certainty that in the v century Christianity had not vet made its way into the temples of the Akropolis. But in the year 435 the order came from Emperor Theodosios II: Cuncta fana templa, delubra destrui conlocationeque venerandæ Christianæ religionis signi expiari.165 Although we have no definite record in regard to the matter until 630, still it is safe to presume that it was not long after the promulgation of the edict that the Parthenon, Erechtheion, Chalkotheke, etc., were converted into Christian churches. In accordance with the then prevailing custom of dedicating the temple of a heathen god to that saint who was most nearly the counterpart of the pagan deity, the Parthenon, the shrine of the virgin goddess of wisdom, was turned over first to St. Sophia, and not long afterward to the Panagia—the Virgin Mary. In like manner the temple of the knightly Theseus became the church of St. George.

In the conversion of Greek temples into churches, the first care of the Christians was for the orientation of their place of worship, that the altar might stand at the east end. In the case of the Parthenon, in order to accomplish the desired end, it was necessary to cut a door through the western cella-wall, for there had been none there before, and in that way the west end became the front, and the opisthodomos the narthex of the new church. The old entrance would, of course, be entirely closed up by the building of the apse.

¹⁶⁷ The fanatical Neoplatonist, Proklos, tells how a beautiful woman appeared to him in a dream and bade him prepare his house, for the Queen of Athens wished to come and dwell with him. This was the token that she must soon leave her own house. And, as a matter of fact, the Christians soon afterward removed the statue from the Parthenon.

¹⁶⁸ Cod. Theod. XVI, 10, XXV.

The thought of the barbarous treatment suffered by ancient temples at the hands of the early Christians rouses the indignation of all lovers of Hellenic antiquities; and yet our pain at the defacement that we behold may be moderated by the consideration that, if these peerless temples had not been converted into churches, they might have been ruthlessly destroyed as monuments of idolatry, sharing the fate of many another buildinglike the Asklepieion-of which the Church could make no use. The pediments also did not remain untouched. Even in the earlier Byzantine times the Athena at least had disappeared from both pediments of the Parthenon, and in her place were substituted niches, presumably with representations of saints. The columns were used as a sort of church record; there are still to be found scratched upon the columns of the Parthenon notices recording the days on which the dignitaries of the church had died. The last date is 1190. Other inscriptions contain short ejaculatory prayers, texts, etc.—such as are to be found on the walls of the catacombs of Rome.100

A period of almost total darkness, unbroken by the light of a single important notice concerning the Akropolis, begins with Justinian (527–565) and continues down to the latter part of the middle ages; even from that time on it is possible to trace out the history of but few buildings. Justinian, out of jealousy for the new academy at Constantinople, dealt the University of Athens its death-blow; Athens, as the educational centre of the world, consequently became a thing of the past. But as an art centre it still remained his lawful prey. The splendid church of St. Sophia at the Golden Horn was building, and to give it grace and beauty, Athens was plundered without limit. We are told that not only sculptures, but columns and building-material of all sorts were transported to the capital for that purpose, and that the classic buildings of Athens furnished a convenient quarry for Justinian's architects.¹⁷⁰

The veil of the dark ages then closes in about the city of monuments. The light of letters and science is extinguished; the workshop of the arts and of industry, the home of the Muses and of wisdom is now heard of only as a story and no longer sought

¹⁶⁹ MICHAELIS, Der Parth., p. 52.

¹⁷⁰ Cf. HERTZBERG, Athen, p. 217.

by admiring strangers from all parts of the world: it has now become simply a Byzantine fort in a weak, declining land.¹⁷

XIII.-THE FRANKS IN ATHENS.

In 1204, while the crusaders under Enrico Dandolo, the great Doge of Venice, and the famous Margrave Bonifacio II of Montferrat were engaged about the Bosporos, Sgouros of Nauplia arose and overran Middle Greece, captured Athens and burned it to the ground, but failed to get possession of the Akropolis. In the next year (1205) Bonifacio, now made King of Thessalonika, appeared in Athens with his victorious Burgundians and Lombards, and after no great struggle obtained possession of the Akropolis, plundered the churches, and then transformed them from orthodox into Roman Catholic churches.

Thus Attika and Bœotia came under the sway of the Burgundian Otto de la Roche-sur-Ougnon, who, as "Grand-Seignior of Athens" took up his residence upon the Akropolis. But of the changes made by the French dukes (1205–1311) or by the Catalans, who succeeded them (1311–1385), we know absolutely nothing. We are better informed, however, with regard to the operations of the Florentine dukes, to whom the Catalans in turn were forced to yield (1385). Under their dynasty Athens once more flourished. The first two Acciaiuoli took considerable pride in beautifying their city. They built upon the south wing of the Propylaia the mighty tower, which overlooked the whole Attic plain and the sea from Megara to Hydra and Cape Zoster. 172

In The only possible items of interest recorded up to the time of its occupation by the Franks are: (1) the visit of Basileios II, who, in token of his gratitude to the Holy Virgin for his victories over the Bulgarians, held a magnificent triumph upon the Akropolis and dedicated to Saint Mary and her cathedral (the Parthenon) a large number of precious offerings, among them a silver dove (the symbol of the Holy Ghost) that ever fluttered above the altar. And (2) we have a report concerning the great church upon the Akropolis coming to us by way of distant Iceland. A pilgrim, Saewulf, had journeyed thence to Athens, and ne makes mention of an ever-burning lamp that hung in the church of the Madonna.

¹⁷⁸ Bohn, Prop., p. 7, ascribes the building of the tower not to the Franks but to the Turks; how a Turkish tower or a Turkish wall differs from a Frankish tower or a Frankish wall, unless it should happen to contain a contemporary inscription, I am unable to say, and so leave the question unanswered. Herzberg, Athen, pp. 102 and 226, ascribes it to the Burgundian dukes. This also is conceivable, but less probable; it is the Italian dukes of whom such constructions are so characteristic.

The tower filled the whole south wing; the middle hall and the Pinakotheke were turned to other uses; the intercolumniations were built up with walls containing two rows of windows, a floor was put in making two stories for executive offices; above the entablature was a third story for the dwelling, and in this wise the Propylaia was converted into a palazzo à l' Italienne in which the Acciaiuoli lived. They furthermore united the Nikepyrgos with the pedestal of the Agrippa monument by an immense defensory wall 7-8 metres thick, which at the same time served to support a fine terrace in front of the palace of the Duke and a battery on top. To make the defense complete another wall of the same sort was built between the monument of Agrippa and the corner of the Pinakotheke.

These fortifications again necessitated a change in the approach. In the days of Perikles, and before, the road wound up over different terraces to the Propylaia; in the times of the Roman Empire and for centuries after, people had climbed to the Akropolis by the splendid marble stairs; now again the ascent was arranged in winding curves; it led through a gate beside the pedestal of Agrippa, then turned sharply about to the south, passed around south of the great tower, through the last gate and over the forgotten sanctuary of the Graces ¹⁷³ and the great Pelasgic wall, now for the first time demolished, into the Akropolis proper.

The whole Akropolis now reverted once more to its original purpose—that of a citadel. But it must be made to correspond with the new methods of warfare, and was accordingly fitted out with barracks, chemins de ronde, terre-pleins and underground galleries, with reservoirs and magazines, with walls provided with battlements and embrasures, and with batteries at every point. Kimon's wall, however, had not been built with modern engines of attack in view, nor was it calculated ever to defy gunpowder and iron balls. Now, it was in these very times that artillery began to play a considerable rôle as a means of attacking strongholds, and the old walls, neglected as they had been for centuries, were at many points in no condition long to resist a heavy cannonade of shot and shell. To meet this new need and make the wall bomb-proof, they doubled and even tripled its thickness.

¹⁷³ PAUS. 1. 2.

These, after frequent repair, are the walls that strike the attention of the traveler to-day, especially on the south side of the Akropolis and in places on the north; they are built of small pieces of stone irregularly piled together with a vast amount of mortar and braced up with numerous buttresses. Here and there a piece of the modern wall has broken away revealing the massive, mortarless, ashlar wall of Kimon almost unscratched.

The Florentines built extensively upon and about the Akropolis, but they made sparing use of ancient materials. For the most part the material employed was taken from buildings of the Byzantine period.

Such was the condition of the Akropolis with the principal temples still practically uninjured, when in 1456 it passed into the hands of the Turks.

XIV.-THE AKROPOLIS UNDER THE TURKS.

The lawless condition of affairs that obtained at the court of the last of the Acciaiuoli in Athens made it a comparatively easy matter for Mohammed II, the conqueror of Constantinople, to annex Athens to his kingdom. In 1456 his general, Omar, took possession of the lower city and in June, 1458, Franco II surrendered the Akropolis also. The Sultan himself soon afterward visited his new possessions and was so charmed with the beauty and splendor of the remains of the ancient days, that he treated the city, considering that he was a Turk, with great kindness. Disdar-Aga, to be sure, took up his residence upon the Akropolis; the Propylaia became his headquarters, the Erechtheion his harem, while, strange to say, the Parthenon was left to the Christians as their chief place of worship in the city. His subordinates covered the Akropolis with their miserable dwellinghouses; they extended the casemates for their cannon; they built the great wall on the southwest, through the gate in which until recently—it is now removed entirely—all visitors to the Akropolis had to pass, and strengthened the circuit wall of the citadel still further.

After the Sultan's first visit to Athens, the Parthenon was still retained as a Christian church. But when, two years later (1460), Mohammed returned from subjugating the Peloponnesos and

found the Athenians plotting against his rule, he not only removed the leaders of the conspiracy but also, to punish the rebels still further, converted the church into a mosque (1460). Fortunately, however, this was accomplished without causing much injury to the building. The first thing for the pious Mussulman to do was to cover up the detested pictures of saints upon the walls with a good heavy coat of whitewash; and then on the south side of the old opisthodomos they reared up—a most wonderful appendage to the massive proportions of the Doric temple!—a tall and slender minaref, and to afford access to it they cut in exceedingly rough and barbarous Turkish fashion a door in the west wall of the cella. A view of the Akropolis drawn in 1670, gives us a fairly complete view of the condition of the buildings at that time.

And then again for two more centuries Athens disappears almost totally from history. The Moslems kept exclusive possession of the Akropolis during all that time, and, with their dislike for any object of art, of how many priceless works of sculpture must their religious fanaticism have robbed us during those two centuries. And yet down to 1656 the Akropolis had still suffered no great catastrophe. We know that the Turks either from religious conviction or from downright depravity had long been active in defacing the sculptured monuments that lay near at hand; we know further that educated vandals from enlightened Europe in their very zeal for antiquities continued the work begun by the Mussulmans, for they carried away the smaller pieces of sculpture and scattered them all over the world and defaced those that they could not carry away, by breaking off small pieces—as a head from a metope or frieze—wherewith to enrich their collections at home. And yet, notwithstanding all these depredations of Christian and of Turk, the great buildings of the Akropolis still stood almost intact until 1656. On one unfortunate night in that year¹⁷⁴ lightning struck a heap of powder which Isouf-Aga, then in command of the fort, had piled up in the east portico of the Propylaia preparatory to bombarding on the morrow a little Greek chapel

¹⁷⁴ The date is given by Spon and Wheler, Voyage en Grèce, etc., 11, p. 107; the explosion occurred twenty years before their account was written (1676), and thirty years before the explosion of the Parthenon (1687).

on the hillside opposite his palace. A frightful explosion followed, blowing Isouf-Aga into the air, but with him, less happily, a large part of the Propylaia. The whole architrave was shattered and with it the richly wrought ceiling also fell; two of the Ionic columns were entirely thrown down and the tops of all the rest. Even to-day as we gaze upon those broken and distorted columns we may read what fearful havoc that stroke of lightning worked. The west portico, however, suffered less.

But now the mischief was only well begun. The really disastrous year was 1687. All the Peloponnesos had been swept by the flames of war; the victorious mercenaries under Francesco Morosini, afterward Doge of Venice, had wrested from the Turks one position after the other and were pressing on toward Athens. The Turks began to feel insecure even upon the Akropolis, and in order to intrench themselves more strongly in their citadel, they razed the little temple of Athena-Nike clear to the stylobate and built it block for block into new breastworks before the Propylaia, surmounted by six pieces of ordnance.

On the evening of the 21st of September of that year Morosini's fleet sailed into the Peiraieus; on the morning of the 22d the batteries on the Museion and Nymphaion and the mortars on the Areiopagos and to the east were all ready, and their dreadful work of destruction was begun. But impatient that their progress in bombarding a fastness so mighty was necessarily so slow, they resolved upon a measure that should wipe the Akropolis for ever from the face of the earth-they would undermine it and blow the whole hill, with all its temples, into the air. But the work proved too formidable and was soon abandoned. 176 Not long afterward a deserter came over from the Turkish side and with the hope of deterring the enemy from their bombardment told them that they were in danger of blowing the splendid Parthenon to pieces, for in that, he said, the Turks had their powder magazine. The falsehood (for it was only a day's supply of powder that the Turks had heaped up in the cella of the Parthenon) was fatal; instead of ceasing their fire, the mortars were all turned upon one point—the Parthenon itself—but for a long

¹⁷⁵ Вонк, Ргор., р. 8.

¹⁷⁶ MICHAELIS, Der Parthenon, pp. 66, sq.

time, as if the guns refused to do their duty against such a mark, the firing was without effect.¹⁷⁷ Finally, however, at seven o'clock in the evening of the 26th of September, a German lieutenant in Morosini's army tried his hand at one of the eastern mortars and the unblessed bomb fell through the roof of the Parthenon, directly into the heap of powder, and the masterpiece of Iktinos and Kallikrates, almost whole until that moment, was torn asunder. And this was not all, but the explosion caused a conflagration that for two days and nights raged among the houses of the Turks, bringing destruction and injury to the other temples there.¹⁷⁸ Such a price did Venice pay for six months' possession of the Akropolis of Athens.¹⁷⁹ How fortunate that less than three years previous Jean Jacques Carrey had come that way and made his invaluable drawings of the Parthenon sculptures!

After the capitulation of the garrison, the captors proceeded to select choice pieces of the marble sculptures to carry home as mementos of their glorious achievement. Morosini, recalling the fine bronze horses brought home by some predecessor to adorn St. Mark's, was seized with a desire to possess himself of those wonderful horses of Athena and Poseidon in the west pediment of the Parthenon and to take them as a trophy home to Venice. But through the deplorable carelessness of the workmen (they were sailors), the figures fell sixty feet down upon the rock and not merely broke in pieces, but "they went up in dust." ¹⁸⁰ Losing these, the conquerer took instead the three huge lions that now stand guarding the entrance to the arsenal of the Queen of the Adriatic.

As soon as the Venetians were gone, the Turks at once resumed possession of the Akropolis. The Italians had set them an example of destruction on a gigantic scale, and if they had showed any mercy before, they now showed none; the colossal heap of ruins made by the explosion of the Parthenon, together with every other piece of white marble not too large to be easily moved, and if the fragment chanced to contain a relief or an in-

¹⁷⁷ CURTIUS, Die Akropolis v. Athen, p. 31.

¹⁷⁸ Вонн, Ргор., р. 8.

¹⁷⁹ CURTIUS, Die Akropolis v. Athen, p. 31.

¹⁸⁰ "La poca accortezza di alcuni gli fe cadere, e si ruppero non solo ma si disfecero in polvere;" from a letter written by a Venetian officer, who arrived in the Peiraieus on the 18th of December, 1687.

scription, so much the better—all this found its way into their limekilns in order to furnish mortar for repairing their miserable huts and the walls of their fort. And yet these same huts, again filling up the whole Akropolis, covered and saved many a precious fragment or important foundation that might otherwise have perished.

The minaret in the Parthenon still stood; the mosque was rebuilt and the work of destruction went steadily on. wrought by ignorance, wantonness and religious fanaticism on the part of the Turks among the relics of antiquity was again increased by the covetousness of the educated foreigners who now began once more in greater numbers to visit Athens. sire for choice bits of sculpture inspired the Turks with a new motive to more extensive devastations—a chance to make money. For more than a century the plundering and destruction continued, and it is a wonder that anything was saved. Only the boundless wealth of the Akropolis in treasures of marble can possibly account for the fact that all did not perish. As early as 1749, when Dalton made his drawings of the Akropolis, not half of the figures belonging to the pediments of the Parthenon were in their place; some he found in fragments, others thrown down but well preserved, while many had already disappeared entirely. Under these circumstances it was scarcely an act of plunder or destruction that Lord Elgin committed, when in the first years of our century he removed the greater part of the Parthenon sculptures from Athens and in that way saved them for us from the destructive mania of the Turk, the vandalism of later travelers and the dangers of war. It was also far from being a theft, as it is often called even now. For after having worked in 1800 and 1801 against the greatest conceivable difficulties in making casts and drawings of the remains of sculpture and architecture upon the Akropolis, he then received from the Sublime Porte a firman, in accordance with which he was granted permission " to go in and out of the Akropolis at will, to excavate, to build scaffolding, mould and measure as he pleased; and if he wished to take away a few blocks of stone with inscriptions or figures upon them, nothing should stand in the way of his doing so." this grant he collected figures from the pediments, metopes, blocks

of frieze, and sculptures of every sort, sent them off to England and so preserved them from the certain destruction with which they were threatened. For that he has our thanks. But in one respect he, or rather his workmen (for he himself was seldom present in Athens while the work was going on), will always deserve severest condemnation, in that the buildings were often barbarously and inexcusably mutilated in taking down the desired pieces of sculpture. Portions of the roof and cornice of the Parthenon were torn off, let fall and broken to atoms in order to remove the metopes; one of the Caryatids was torn out from the porch of the Erechtheion with such brutal violence, that both the architrave and the lacunaria of the ceiling fell with a crash and were ruined.¹⁸¹

The rescue was accomplished none too soon; for in the year 1821 the War for Grecian Independence broke out, and Attika was the scene of many a bitter struggle. In the second year of the war the great Odysseus built above the Klepsydra a mighty bastion—now removed—the last military construction built upon the Akropolis. Still, for several years more Athens was spared. At length, bringing destruction with it, came that last long siege of the citadel of Athens, from July, 1826, to June, 1827. The Turkish cannon proved no less destructive than the Venetian. Bombs and shot of every description shattered the sculptures that were still in place and shivered the standing pillars. Especially unfortunate were the bombs that struck the two northwest columns of the Erechtheion and precipitated a part of the elaborate ceiling of the porch.

From the 5th of June, 1827, until the spring of 1833, while the seat of the new national government was at Nauplia, the Turks remained stolidly in possession of the Akropolis. But when the seat of government was transferred from Nauplia to Athens in 1833, they had to make way for the Bavarian garrison that accompanied King Otho from Munich. This event marked the end of the destruction of antiquities in Athens, and with it the Akropolis for ever ceases to be a citadel.

¹⁸¹ For the details see MICHAELIS, Der Parthenon, pp. 74-87.

XV.-FROM THE GREEK REVOLUTION TO THE PRESENT.

We have now seen how the Akropolis grew, from a jagged rock to an inexpugnable fortress, and from a fortress to a shrine of surpassing splendor; then we have seen how it fell into ruin and decay. Now comes the time when the monuments of antiquity are rescued from the débris, from their covering of Byzantine, Frankish and Turkish buildings and walls, and when ancient Athens is more clearly restored to our admiring eyes. While excavations on a small scale were occasionally instituted even in the earlier years of this century, especially by that zealous collector of antiquities, the French Vice-Consul, Fauvel, still the epoch of important systematic excavations dates from the time when Athens was made the capital of the new-made kingdom and Peiraeus again fitted out as its port. [82]

The first real work of excavating began at once in May, 1833; with a modest sum raised by private subscription the first small clearing was made beside the Parthenon. In the next year the work was resumed, this time at the public expense, under the direction of the architect Klenze, of Munich, but without any particular results. We owe Klenze our thanks principally for what he failed to do; his most fondly cherished plan was to erect upon the Akropolis the royal palace of King Otho, and to the king himself belongs the credit of defeating the scheme.

It was not until January, 1835, that the government itself took up the work on a large scale and according to a systematic plan, and prosecuted it with wonderful success after Ludwig Ross, as Conservator-in-chief of Antiquities in Athens, in conjunction with the architects Schaubert and Hansen, was put in charge of the work of exploration and restoration. They began with the removal of the works of fortification and other modern buildings, continuing also the excavations about the Parthenon, which was then buried up to the second step in the débris of centuries. 182

Besides a large number of bases of votive offerings, inscriptions, and other smaller monuments, they discovered in that year (1835-6) considerable remains of the Parthenon sculptures—from pediments, frieze and metopes; the west front of the Propylaia was

¹⁸⁸ MICHAELIS, Der Parthenon, pp. 88 sq.; WACHSMUTH, Stadt Athen, I, pp. 23 sq.

cleared up, and above all nearly every piece of the Nike temple was found and the temple reconstructed part for part, except the roof, upon its old foundations.

Scarcely had this valuable service been rendered when Ross was superseded by the untrustworthy Pittakis. Under his direction the work about the Propylaia was finished (1837), and the foundations of the Erechtheion laid bare (1838–40). In 1842 the old mosque in the Parthenon, restored in 1688 after the explosion, collapsed and was all removed except the lower part of the minaret, which was taken down in 1889.

The Bavarian administration thereupon gave up further prosecution of the task. But the world could not suffer it to rest in a state so far from completion. The credit of having continued the excavations belongs to the French government. In 1852 under the supervision of M. Beulé, at that time a member of the French School at Athens, the Roman stairway and the gate that bears his name were freed from the immense Turkish and Venetian bastions built upon them.

After the French had ceased operations there came a Prussian expedition led by Adolf Bötticher; they directed their energies to pulling down the Byzantine apse in the pronaos of the Parthenon and to removing the rubbish that Pittakis had left in and about the Erechtheion. The results of his investigations are given in detail by Bötticher himself in his "Akropolis von Athen."

Only two more agencies have since contributed to the completion of the work upon the Akropolis. The next after the French and Prussians was the Έταιρία ἀΑρχαιολογική, the "Archæological Society of Greece;" this society, at first generously supplied with funds by Dr. Schliemann, carried on the excavations until we could get a fairly complete notion of the post-Periklean Akropolis. In 1876 even the old tower upon the south wing of the Propylaia was taken down in the hope of new discoveries.

It was then thought that every corner, every pile of earth and rubbish had been examined and that the Akropolis contained but little that was hidden from sight. And yet the explorations of the Greek government and the Archæological Society, carried on from 1885 to 1889, have been richer in results than almost any other excavations that might be named, and they are at the

same time more complete, for we know now to a certainty that the spade can reveal nothing new within the walls of the Akropolis. Excepting where the ancient buildings stand, the whole surface of the Akropolis down to the natural rock has been moved and minutely examined. These new excavations have not only brought to light a vast number of statues, inscriptions, bronzes, terracottas, remains of great buildings, etc., and have given us much new information concerning the age of Perikles, but they have also thrown upon the condition of the pre-Persian Akropolis, with its palace and shrines, and even upon its natural form, such a flood of light as we had never hoped to see.

We have looked upon a picture of perfect beauty and then upon another of that beauty's destruction and decay; and at the end, as at the beginning, Athens is and always will be the Mecca toward which every friend of ancient art will turn. And if in the dazzling light of that southern sun it brings a feeling of pain and sadness to look upon the desolation wrought by the hand of man upon those divine creations of man's hand, and if it is impossible to imagine from the few, shattered fragments before us what the whole must have been, let us wait till nightfall. Who that has ever stepped out from the Propylaia upon the inner Akropolis with the full moon hanging in the sky can forget the impression made upon his soul! The vast proportions then are realized; the world of ruins round about is animated with life; the awakened fancy fills up all gaps and covers over every defacement; the sanctuary of Athena and Erechtheus small and serene in the moonlight shows all its ancient elegance; and above it rises majestically the imposing Parthenon with its forest of pillars. The gods return from the Hyperboreans and take their places again in the pediments. We forget the Christians and the Turks, the Venetians and Lord Elgin, and with beating hearts we bow in silent admiration before the consummate art which created that harmonious whole.185

WALTER MILLER.

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186 Cf. Michaelis, Der Parthenon, p. 91.

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ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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AFRICA.

ECYPT.

PROGRESS OF EGYPTOLOGY.—HIEROGLYPHIC STUDIES, &c., 1892-3.—The professorship and library of Egyptology established at University College, London, by the late Miss Amelia B. Edwards, is the first provision of the kind made in Great Britain. At first the books alone were available for reference, but the new buildings finished this summer have set free ample space for all the collections, books, photographs and antiquities. Prof. Flinders Petrie's lectures have been full of originality and interest, his practical experience having led him into many by-paths which had not attracted the attention of other Egyptologists. At the same college, Prof. R. Stuart Poole has devoted a part of his time to giving instruction in the Egyptian language and hieroglyphics, while in afternoon meetings, at the rooms of the Society of Biblical Archæology, Mr. Le Page Renouf has laid before large audiences the results of his minute investigations in Egyptian philology.

History.—Mr. Petrie's Medum, containing plans of the pyramid, the pyramid-temple and several of the private tombs of the necropolis of Mëdüm, presents evidence of a highly developed civilization from the time of Seneferu, the earliest king of the IV dynasty. Most of the architectural forms of the later dynasties appear already in this dynasty. The Archæological Survey of the Egyptian Exploration Fund has been especially busy amongst the monuments of the V and VI dynasties, in Middle Egypt, from Sheikh Sa'îd to Dêr el Gebrawi. The gap between the VI and XI dynasty is almost as obscure as ever. For the XII dynasty we now have the full publication of the first

fourteen tombs of Beni Hasan in the first memoir of the Archæological Survey. For the Hyksos period, it has long been supposed that their power hardly extended to Upper Egypt, but two small tombs containing the name of one of the two Apepis would indicate that their power extended as far south as Gebelên, above Thebes. Certain chronology commences with the xvIII dynasty. The calendar on the verso of the Ebers Medical Papyrus records a coincidence between the sothic and the solar year, which astronomy determines as having taken place in the years B. c. 90-87, 1550-1547, and 3010-3007. The coincidence occurred in the ninth year of a certain king, whose name long baffled decipherers; but Prof. Erman and others have shown the name to be a cursive rendering of the prenomen of Amenhotep I, second king of the xvIII dynasty. Our knowledge of the approximate date of this dynasty now enables us to fix more exactly the ninth year of Amenhotep's reign as falling within the period 1550 to 1547. The Tel el-Amarna tablets, recording the correspondence of Amenhotep III and Amenhotep IV with their officers in Syria, have now been published in fac-simile. The similar tablet dug up in the ruins of Lachish by Mr. Bliss, for the Palestine Exploration Fund, is one of the most remarkable coincidences of discovery on record. The exhibition of Prof. Petrie's discoveries at Tel el-Amarna, held at Oxford mansion last year, revealed new styles and methods of workmanship. In some cases the walls were inlaid with hieroglyphs of alabaster, granite and absodian, and the columns were encased in moulded pottery. Floor as well as wall paintings were found. The duration of the reign of Amenhotep IV has hitherto been uncertain. But the series of inscribed wine jars from Tel el-Amarna seem to prove that the last year of his reign was the seventeenth.

Geography.—Maps of Upper and Lower Egypt, with most of the chief monumental sites, are published at the end of the Archæological Report of the Egypt Exploration Fund. The Vicomte J. de Rougé has published a Géographie des nomes de la Basse Égypte. Major Brown discusses the Fayum in his Fayûm and Lake Mæris, and Brugsch Pasha the same subject in the Zeitschr. f. Aegyptische Sprache. An important Arabic treatise on the cities and villages of Egypt, of the date 1390–1407 A. D., has been discovered and published by Dr-Vollers under the title, Description de l'Égypte par Ibn Doukmak.

Arts, Crafts, &c.—Prof. Petrie's lectures in London and the publications of the Egyptian Exploration Fund throw new light upon the history of the arts and crafts in Egypt. In Archæologia, vol. liii, pp. 83–94, Mr. Budge publishes a number of Egyptian bronze weapons, several of which are dated. Mr. Griffith in Proc. Soc. Bibl. Arch., vols.

xiv and xiv, treats of weights and measures. Mr. Baillet in Miss. Arch. Franc. au Caire, t. ix, publishes a mathematical papyrus of the VII or VIII century, A. D. Though written in Greek, it retains a broad substratum of ancient Egyptian methods. Herr Ludwig Borchardt and Dr. Seltre elaborated in the Zeitschr. f. Aegypt. Sprache a theory that the pyramids were, to a great extent, restored in the xxvI dynasty.

Religion.—Mr. Renouf has interested a wide circle of readers by his translation of the Book of the Dead in the Proc. Soc. Bibl. Arch. Prof. Wiedeman has made a useful index of the names of deities and demons occurring in the third division of Lepsius' Denkmüler.

Philology.—Prof. Hess of Freibourg has published in photographic fac-simile, with an excellent glossary, a partly gnostic papyrus in the British Museum. The Egyptian alphabet has been restudied by Georg Steindorff in the Zeitschr. d. deutschen Morgenl. Gesellsch. Prof. Erman has shown that there are no homophones in the alphabet of the Early Empire.

Foreign Relations of Egypt.—An important work on this subject is W. M. Müller's Europa und Asien in den Aegyptischen Inschriften. It is likely to be the standard work of reference on this subject for a long time. Prof. Hommel has endeavored to show in Der Babylonische Ursprung der Aegyptischer Kultur a connection between the earliest civilizations of the Euphrates and the Nile. Prof. Erman in the Zeitschr. d. Deutschen Morgenl. Gesellschaft has examined the ancient hieroglyphic roots that have been connected with Semitic words. His results are chiefly negative, though he believes in an early and far-off relationship.

Miscellaneous.—M. de Morgan, the new Director-General of the Antiquities of Egypt, has practically completed the arrangements of the monuments in the Ghizeh Museum, and forty-six new rooms have been opened to the public. A laboratory and two exhibition rooms have been set apart for Egyptian anthropology. A museum of Græco- and Romano-Egyptian and Coptic antiquities has been established at Alexandria. The director is Dr. J. Botti.

M. de Morgan has undertaken a survey of the monuments of Egypt from the First Cataract northward. The latest memoirs of the Mission Archéologique Française au Caire include many Coptic and Arabic documents and monuments, and the beginning of a complete edition of the texts and scenes of the temple of Edfû.

Herr Brugsch-Bey, curator of the Ghizeh Museum, announces interesting discoveries from the excavations at Memphis, Sakkârah and Mêr. At Memphis were discovered a red sacred boat ten feet long, a

statue of Rameses III, with a divinity, two colossal statues of the god Ptah, and others of less importance. From Sakkârah came twelve colossal stelæ, some fine bronzes, and a statue of a scribe, one of the finest of such statues, resembling the seated scribe in the Louvre. At Mêr were found a number of wooden statuettes and several boats of the xi dynasty. Among the statuettes is one of bronze, the first known to belong to so early a period. Some mummies of the Græco-Roman period were found with heads of plaster, painted in most lifelike way.

The cemetery of Heliopolis has been extensively worked by M. Philippe of Cairo, who has discovered in it some sarcophagi of the Saite period. Messrs. J. J. Taylor and Somers Clarke spent several months in the neighborhood of El Kåb. At Kôm el-Ahmar they cleared two tombs of the vi dynasty and copied the inscriptions. The details of the little temple of Amenhotep III in the desert were photographed to scale and drawings made by the temples, the tombs and the city wall.

M. Golénischeff has catalogued the Egyptian antiquities of the Hermitage Museum. Some of the papyri are of the highest importance. The guide (Führer) to the exhibition of the Rainer papyri is a most valuable work, especially for the Byzantine and early Arabic periods. Some small fragments of papyri in the collection of Lord Amherst have done good service in indicating the nature of the lost portions of some large rolls in the Berlin Museum. They have been utilized by Mr. Griffiths in "Fragments of Old Egyptian Stories," published by the Society of Biblical Archæology. Prof. Krall has published in the Memoirs of the Royal Academy of Sciences at Vienna a long Etrusean text on the linen wrappings brought from Egypt and deposited in the Museum of Agram. The ninth International Congress of Orientalists, held in London in Sept., 1892, was attended by many distinguished Orientalists. Much sensation was caused by the exhibition of a fragment of a papyrus of the Septuagint from Egypt, supposed to be of the 2d century A. D., but since discovered to be later. Prof. Georg Ebers has been compelled by weak health to give up the chair of Egyptology in the University of Leipzig. His successor is to be Dr. G. Sterndorff, at present assistant director of the Egyptian Museum at Berlin .- G. M. GRIFFITH in the Archael. Report, 1892-1893, of the Egypt Exploration Fund.

THE ARCHÆOLOGICAL SURVEY OF EGYPT.—MR. NEWBERRY'S WORK, 1892-93.— The main basis of operations was in the tombs of Sheikh Sa'îd, which are situated on the east bank of the Nile, a few miles to the north of Tel el-Amarna. The survey also explored the country from El Bersheh to 'Arab el-Hetam, surveyed two important groups of tombs near Deir el-Gabrawi, and completed the water-color drawings of the most interesting scenes at Beni Hasan and El Bersheh.

The tombs of Sheikh Sa'fd are in a series of four tiers, one above the other. The ancient tombs number over eighty, but only seven are inscribed, and only these are interesting. Architecturally, they are of three types:

 A small square chamber cut out of the hillside; doorway small, without architectural features.

A small chamber cut out of the hillside; doorway small, with rounded lintels and sloping façade.

3. Two or more chambers with false doors, architectural façade representing sloping falls surmounted by a heavy beam, and rounded lintel to doorway.

The inscriptions show that the hill here was used as the necropolis of the princes of the Hermopolite nome and by superintendents of "the new towns." Several contain cartouches of monarchs of the early kingdom, and bear inscriptions which show that they were restored by descendants of the owners in the XI or XII dynasties. If we examine the tombs from the north, the first of any note is No. 14. It belonged to the superintendent Teta-anch, and contains some basreliefs and inscriptions. No. 17 contains two large false doors on either side of the entrance. The inscriptions show that the owner was a "royal chancellor" and a "familiar friend of the king." His wife was a priestess of Hathor. No. 18 was the tomb of Nan, the "great chief of the Hermopolite nome." No. 19 belonged to Meru, the "Superintendent of the South," and "Governor of the Citadel of Pepi." No. 21 was that of Hepa, as indicated by inscriptions painted in hieroglyphics, and No. 23 that of a prince Urarna. The finest tomb was also executed for Urarna. It has beautiful and delicate bas-reliefs, which give a varied and interesting picture of life in Egypt during the Ancient Kingdom. The scenes representing agricultural pursuits are especially noteworthy, and the domesticated animals are depicted with great skill.

Between Sheikh Sa'îd and Dêr el-Gebrawi are monuments of various periods, which have been carefully noted. To the northeast of Tel el-Amarna is a series of tombs ornamented with paintings, sculptures and inscriptions relating to various officers of the court of Khuenaten and his immediate successors. To the east are many tombs of a similar character, which ought to throw a flood of light upon one of the most remarkable periods of Egyptian history. In a ravine far up the great roads dividing the Gebel el-Tit from the Gebel Abu Hasâr is a group of four large tombs, apparently royal, for

among them is the last resting-place of Khuenaten, the founder of the city of Tel el-Amarna and of the heretic religion. A sketch-plan of this tomb is given. In the hills behind the great plain of Tel el-Amarna are numerous limestone and alabaster quarries. Among these are the alabaster quarry of Hat Nub, a limestone quarry with the cartouche of Queen Ti, an alabaster quarry inscribed with the names of Amenemhat II and Usertesen III. Two, those of Aba and of Zan, are of special interest. The walls of these two tombs are covered with interesting scenes and inscriptions; and, though considererably earlier in date than those of Beni Hasan, are not unlike them in the subjects of the paintings. Arts and trades, tax-gathering and the bastinado, sowing and harvesting, fishing and hunting, dancing and singing are illustrated, and have explanatory notes in hieroglyphics. The names of the members of the families and their household servants are recorded. The results of the present season's work will probably be issued under the name of Sheikh Sa'id and the Gebel el Gebrawi.—Percy E. Newberry in the Archæological Report, 1892-1893, of the Egypt Exploration Fund.

EXHIBITION OF THE EGYPT EXPLORATION FUND IN LONDON.—The private exhibition of the Egypt Exploration Fund, held by kind permission of the Marquis of Bute at 83 Eccleston square, from July 15 to 26, was highly interesting to students of ancient Egyptian art and civilization. Fragments of wallpaintings from tombs of the XI or XII dynasty, at El Bersheh, were exhibited side by side with water-color sketches made but a few months ago by Mr. Percy Buckman, and faithful copies of scenes and signs from the tombs of Beni Hassan and Dêr el Gebrawi by Mr. W. Blackden and Mr. Howard Carter. The fine work in drawing and colors, the enamel-like firmness and thickness of the paint, on a small fragment of limestone with a drawing of three geese upon it was particularly noticeable among the ancient work. But a great attraction to Egyptologists was to be found in copies of single hieroglyphs of the XII and earlier dynasties, such as were still drawn and colored in conformity with the nature of the objects which they were originally intended to represent. Nearly two hundred of these hieroglyphs have now been carefully fac-similed by artists of the Egypt Exploration Fund during the last two seasons. We have only to look at the condition of one fine fragment from the tomb of Tahutihotep at El Bersheh, to recognize afresh how imperative it is that faithful pictorial records should forthwith be made of the exposed monuments of Ancient Egypt. M. de Morgan is pushing on this work in the name of the Service des Antiquités with his well-known administrative ability; but the field is wide and the

skilled laborers in it are few, while even the strong hand of the Director of Ghizeh cannot altogether stay the destruction wrought there by the hand of nature and by the natural man. The tomb of Tahutihotep has long been wrecked beyond all possibility of reconstruction in situ—probably by earthquake; and, on that account, Mr. W. Fraser, as an officer of the Egypt Exploration Fund, was permitted by M. Grébaut to save the best of the fallen painted blocks from further damage and defacement by the Arabs.—Acad., July 29.

In the *Times* of Oct. 7, 1890, Mr. Villiers Stuart offered £50 to the Egypt Exploration Fund, on condition that forty-nine other persons should each give a like sum towards the work of securing exact copies of scenes and inscriptions from the ancient Egyptian monuments. At present we understand that only three persons (two English and one American) have come forward in response to his challenge. But this exhibition will certainly have aroused both fresh and new interests for an undertaking which appeals to all students of science, of

art, and of history.-Acad., July 29.

THE GOD OF THE ZODIACAL LIGHT.—In consequence of a most important discovery by Hermann Gruson, a specialist on light, Dr. Brugsch has entered into a detailed study of the zodiacal light as known to the ancient Egyptians. It is a phenomenon very prominent in Egypt before and after sunset-and the Egyptians worshipped it in the same way as they did the sun. Its natural shape is pyramidal and it lasts about three-quarters of an hour. Its symbol among the Egyptians is found to be a triangle, and the god that represents it is figured as a man in royal costume, whose head is crowned by an elongated triangle. The name of the god is Sopd or Sopdon, and he is connected with "Horus the triangular." The sense of "zodiacal light" now to be given to the sign of the triangle explains many passages which have been differently translated. The zodiacal light is supposed to have come at the very beginning of the creation of the world, before the sun, and is connected with the figure of the creating god. The zodiacal light is spoken of as rising from the ocean. On a number of monuments this light is figured as a pyramid between two mountains, in a way corresponding to the circle of the sun.

The centre of the worship of the zodiacal light was the city of Gosem or Goshen, in the province of Arabia in the Delta. Here a splendid sanctuary was dedicated to the god Sopdon, who gave to the city its sacred name Pa-Sopdon. Cf. Naville's volume on Goshen.—

Proc. Soc. Bibl. Arch. xy, 5-6.

Investigations by the French School.—Prof. Sayce writes: M. de Morgan, M. Bouriant and the members of the French Archeological

School have now left Sehêl and are anchored at Elephantinê. They have copied and numbered all the inscriptions at Sehêl, as well as on the mainland between Assuan and Shellâl; and the whole district has been surveyed and mapped by M. de Morgan. They will soon be able to descend the river to Kom Ombos and superintend the excavations there. Meanwhile a very perfect statue of a seated scribe has been found at Saqqârah and removed to the Gizeh Museum. It is one of the finest examples of the art of the Old Empire which has as yet been discovered. It was disinterred from one of the tombs which the Museum has been excavating. Other excavations are being carried on in the same locality by Lord Blytheswood. M. Naville, who was at Assuan last week, has now begun his work at Dêr el-Bâhari, and M. de Morgan has lent him a railway for the removal of the rubbish. (For the excavations at Kom Ombo see special heading.)—

Athenæum, Feb. 25.

At a May meeting of the Académie des Inscriptions, Prof. Maspero gave a report of the archæological work done in Egypt during the past winter under the direction of M. de Morgan. This chiefly consists in beginning a comprehensive catalogue of all the monuments of the country, which includes a record of inscriptions, paintings, &c. The district specially surveyed during the last five months is that between Philae and Kom-Ombo.—Acad., June 3.

EGYPTIAN PECTORALS.—In an article on pectorals in the *Proc. of the Soc. of Bibl. archæology* (Vol. xv. 8, 1893), Mr. E. Towry Whyte says, "I do not propose to include the large number of scarabs, commonly called the heart scarab, which are generally found in place of the pectoral; they are found both as painted ornaments on the mummy case or cartonage wrapping, and as carved or moulded objects made in various materials.. but I shall restrict myself to the pectoral plate or ornament, an object much less frequently found." They have received but little attention. They are flat plates laid on the breast of the mummy held in position by cords fastened to loops or holes in their top and sometimes in their bottom as well; and they were hung round the neck of the mummy or tied on to the collar.

"They are usually in the form of a naos or shrine, but are also found of an oval shape; they were called in Egyptian utá, which name was also given to the symbolic eye of the sun." The material employed was diverse—gold, silver, bronze, lead, stone, porcelain, wood and composition. "The gold ones are generally inlaid with either colored stones, glass or composition. No enamel in the proper sense of the term has yet been discovered. The pattern on the gold is formed by walls of gold being soldered on the ground in the same

manner as cloisonné enamel, and the stones or glass cut in shape and fixed in with cement. Where composition is employed in place of stone or glass, it appears to be a very hard gum, which is capable of being colored as desired and seems almost indestructible. The bronze pectorals were inlaid in a similar manner and heavily gilt; possibly in some cases they are undertakers' substitutions for gold; "they seem very rare, the best being that of Rameses III in the Mr. Hilton Price's collection. The only one the British Museum (No. 22,840) is a hawk with very large wings, and spread out, and holding in its claws two feathers. Silver and lead are of excessive rarity, the porcelain ones are the commonest.

The earliest pectoral known belongs to Aahmes, first king of the XVIII dynasty, now in the Gizeh Museum. It is of gold, as are all the earliest: those of porcelain come later, mostly from the xxI to the xxyı dynasties: some of the stone and steatite ones in the British Museum are probably of the XIX and XX dynasties. There is a marked difference between those in gold and in stone or porcelain. The gold one of Aahmes is the most beautiful piece of Egyptian jewelry known, and represents the king standing on a boat between two gods who are pouring the water of purification over his head. In the gold pectoral of Cha-em-uas, son of Rameses III, the shrine encloses a uræus and vulture, side by side, while over their heads is a hawk with ram's horns, over which is the cartouche. Two other gold pectorals, of the XIX dynasty, are illustrated in Mariette's Le Serapeum. The bronze pectoral of Mr. Hilton Price is of the usual shrine form but above the cornice are seven large uræi inlaid and crowned with disks, and on either side is an inlaid uræus crowned with the hêt and resting on an ankh. The king (Rameses III) kneels in front of Amen Ra behind whom is Chonsu, also seated. Behind the king stands Mut.

There is a curious wooden pectoral in the British Museum heavily gilded and inlaid in a style similar to the metal ones. In many of the glazed steatite pectorals the subjects are somewhat similar to the bronze one described above and probably of the same age; e. g., Brit. Mus. Nos. 7852, 7850, 7859, 7860. In most of the porcelain pectorals the beautifully carved hard stone scarabaeus either with or without wings forms the central subject, being let into the porcelain (as they are also into the stone pectorals). Those without it have the subject generally painted in outline, usually representing the deceased standing or kneeling, worshipping Osiris (or Anpa). The 30th chapter of the Ritual often inscribed on the scarab shows the connection between the heart scarab and the pectoral. Of unusual examples there is not room to speak. There seems to be no fixed ritual form attached to

the pectoral, and the writer is inclined to regard them as pure ornaments.

ASIATIC INFLUENCE IN THE ART OF AMENOPHIS IV .- A short paper by Mr. W. St. C. Boscawen in the Babylonian and Oriental Record (Vol. VI, 2) entitled "Syrian names at Tel el-Amarna," is mainly concerned with establishing the fact of a large element of foreigners, principally Syrians, at Tel el-Amarna under the reign of Amenophis IV. He calls attention at the start to the fact that the present name generally stated to be Tel el-Amarna was found by him and Mr. Newberry to be Tel beni-Amran "Mound of the sons of Amran" or "Mound of the Syrians." [This hypothesis has been declared to be untenable and the correctness of the name Tel el-Amarna upheld.] Aside from the author's attempts at establishing the Asiatic character of many of the names of high personages found among the monuments on this site, it is interesting to note the fact that the sculptor who made the statues of Khuenaten's daughters, named Atua or Tua (?) was the "royal sculptor of the royal wife Tii." Now, queen Tii was, we all know, a Mesopotamian princess and apparently a fanatical upholder of the foreign element. She probably trained her son Amenophis IV in his Asiatic proclivities. It is natural to suppose that her special sculptor was an Asiatic. This coincides precisely with the style of the art in the royal palace and the tombs, and we can refer on this point to Mr. Petrie's interesting remarks in the Journal, Vol. VIII, p. 106, sq. Both in subject and treatment the art is essentially non-Egyptian.

THE ASIATICS AT TEL EL-AMARNA.—Mr. St. Chad Boscawen writes from Egypt:—The cuneiform despatches found upon the site of Tel el-Amarna in 1887, as well as the names occurring in the Egyptian inscriptions in the tombs, clearly indicate that the city was largely populated by Syrians and other Asiatics, who were attached to the suites of Tii and other Asiatic queens of Amenophis III, as well as to the person of Khu-en-Aten himself. The names—such as Huia, Ruda or Rudua, Mahu, and Tutu-are certainly not pure Egyptian, and have their best equivalents in Asiatic names found in the despatches or documents of the age. We may well compare such names as Khaia, Warda-Makhu, all found in the despatches. Tutu is an especially interesting name, as it is the Babylonian god Tutu. Tutu, the Akkadian equivalent of Marduk, was the morning and evening star-that is, the Babylonian Mercury-and was afterwards identified with Merodach as the morning and evening sun. He is called in the inscriptions by the title of the "restorer and creator, or generator (mūallidat) of the gods (stars)." This name becomes of particular importance when we remember that it is in the tomb of Tutu (in the S group) that the beautiful hymn to the Sun-god is found. The more one examines the remains of the city of Khu-en-aten—the construction of the tombs, the art, the architecture, and sculpture, and the names of the officials mentioned—the more convincing becomes the evidence of a preponderating foreign Asiatic influence over all.

AN INSCRIPTION OF KHU-EN-ATEN. - One of the few monuments of the "heretic King" Khu-en-Aten or Amenophis IV in the British Museum is illustrated in the Proc. of the Soc. of Bibl. Arch. (xv, 4). In its inscriptions there are mentioned besides the king his wife Nefer-neferu-Aten Neferti, the Babylonian princess, and his daughter Aten-merit. Altogether contrary to custom the wife is mentioned only incidentally as the mother of the daughter, the object of the inscription being to glorify Khu-en-Aten and Aten-merit. Among the numerous inscriptions of this reign in the Denkmäler not one is to be found similar in this respect. Aten-merit was the eldest of the king's seven daughters (he had no sons) and she married Saa-nekt Kaeperu-Ka-Ra, one of the three ephemeral kings who succeed her father. The erasures are interesting. The queen's name has been erased in both places where it occurs. It is particularly to be noted that the word aten (the name of the chief god) is nowhere mutilated, except in the queen's name, though it occurs in nine other places, and as this fact is observable on other monuments it shows that the attack upon Khu-en-Aten's monuments was of a personal rather than a religious nature; and this hatred extended to the whole of the Khu-en-Aten dynasty, including especially his three successors.

Alabaster Quarries.—Mr. Percy E. Newberry writes: "Whilst our camp was at El Til, I took the opportunity of exploring the desert behind the hills (named Gebel Abu Hasâr, "the hill of the Nummulites") in which the tombs of Khu-en-aten's courtiers and court officials are situated, with the result that I have found several more alabaster quarries. Last season, it may be remembered, I discovered the celebrated alabaster quarry of Hat-Nub, containing, among others, cartouches of Chufu, Nefer-ka-ra, and Mer-en-ra. The quarries that I have found this season contain cartouches of Teta, Amenemhat II, Usertesen III, and stelae of Rameses II and Meneptah I. The latter, with an inscription of several lines, mentions the cavalry and infantry of the king. In the Siut Wadi, I have also found another fine stela of Khu-en-aten, dated in the sixth year of his reign, the first twelve lines of which are in nearly perfect preservation.—Acad., March 12.

ATHOR GUARDIAN OF THE MINES.—Mr. St. Chad Boscawen writes: "I am indebted to Mr. Percy Newberry for the data by means of which to clear up partially an interesting archaeological problem. Shortly be-

fore leaving England, Mr. Theodore Bent showed me the photographs he had taken of the antiquities obtained by him at Zimbaye, in Mashonaland. Among the objects discovered were a number of rudely carved figures of hawks, with curious rosette-shaped eyes. These were placed in prominent positions over the mines, and were evidently intended to represent divine guardians of the sites. I was at once reminded of the association of the goddess Athor and her sacred hawk with the mines in Egypt. On the rocks overlooking the mines in the Waddy Magharah the hawk of Athor is sculptured; and, from the time of Senefui onwards, the region of the Mafka, or turquoise, was sacred to her. Notice, also, the epithet applied to her at Dendera, "I bestow upon thee the mountains, to produce for thee stones to be a delight for all to see." Additional proof of this association of Athor with mines and quarries has been afforded by Mr. Newberry's recent discoveries. A little to the northeast of the Northern Tombs of the heretic city he has recently found a large limestone quarry excavated far into the rock, with massive columns left to support the roof. On one of these is cut, in bold characters, the cartouche of Tii, the powerful wife of Amenophis III. On another column we have the divine name of Athor cut very clearly, thus consecrating the quarry to her. This last week I have visited, in company with Mr. Newberry, a still more ancient quarry of fine alabaster situated about twenty miles due east of the Siout road, slightly southeast of Hadgi-Kandul. This quarry was a natural quarry, afterwards worked as a quarry. The alabaster is of a fine quality; not such as was used for building, but for small sculptures, and that with brown veins for toilet pots, dishes, and for the canopic vases. Over the lintel are several cartouches of Teto, of the vith Dynasty, and a rude portrait of the king, wearing the Uraus serpent. In the interior, of which one aisle measures about 80 feet, the other 108 feet, in length, there are cartouches, or wall paintings, dated in the reigns of Amen-em-hat II and Usertesen III, but not of a later date. Over the centre of the lintel of the entrance is sculptured a rude hawk, again consecrating the mine to Athor. The frequent presence of the sacred hawk of the goddess over the mines in Egypt, and in districts beyond the Nile Valley, and their discovery so manifestly as divine guardians over the Mashonaland mines by Mr. Bent, would seem to indicate a connection between ancient Egypt and Zimbaye, but through what channel it is difficult as yet to say. Another point indicating similarity of work must also be noted. Mr. Bent was fortunate enough to find an ingot mould in the South African mines; and the shape, with indented terminals to hold the cord for the carriage by donkeys or slaves, is exactly the

shape of the large ingot or package on the back of the donkey in the procession of Amu in the tomb of Khnumhotep, at Beni Hasan. It resembles also the Phœnician tin ingot dredged up in Falmouth harbor, and is no doubt the form found most portable by miners in prehistoric times, and preserved until later ages.—Acad., March 4.

A LYDIAN INSCRIPTION .- Prof. Sayce writes: I have a discovery to announce which will be of interest to the students of the archæology of Asia Minor. While I was at Silsilis, my friend, Mr. Robertson, found on a rock immediately above the spot where my dahabiveh was moored, an inscription in two lines of large, finely-cut letters, which I believe is an example of the long-sought-for writing and language of Lydia. The alphabet of the inscription resembles that of Phrygia, differing from it only to the same degree as the alphabet of the Kappadokian inscription discovered by Hamilton at Eyuk, while the forms of the characters are the same as those on the columns presented by Kroesus to the temple of Ephesus, which have been published by Sir Charles Newton in the Transactions of the Society of Biblical Archgeology. Moreover, the inscription contains the proper names Alus Mrshtul. That Alus was Lydian we know from the name Alu-attês; and since Mursilos signified "the son of Mursos," the suffix il or ul must have denoted the patronymic. Assur-bani-pal tells us that the successful revolt of Psammetichos of Egypt from the Assyrian yoke was due to the assistance he had received from Gyges, the Lydian king; and the Ludim or Lydians are accordingly mentioned more than once in the Old Testament (Jer. xlvi. 9, Ezek. xxx. 5, Gen. x. 13) as part of the Egyptian population.

The words of the Lydian inscription are divided from one another by short lines, like the words in the Karian texts. I have discovered two more of these latter texts on the rocks between El-Hoshân and El-Hammâm, a village which lies immediately to the north of Silsilis. One of the two texts is among the longest that has yet been met with, and some of the letters composing it have peculiar forms. In the same neighborhood, besides some Greek graffiti of no great importance, I came across a curious picture cut with considerable skill upon the rock. A woman, clad in a long robe and bonnet, stands with some object in her hand behind a Greek warrior, who is directing a spear at the breast of a naked man, who kneels in front of him, with his arms outstretched in the attitude of entreaty. Behind the latter stands a nude woman, with a garland of flowers in one of her hands, and behind her again a naked boy, who is leading a panther by a string. Below the whole tableau are the words: Τάρκον χαίρε. The name of Tarkon seems to refer us to Isauria. The Greek words are in the cursive hand of the Petrie Papyri and may therefore be dated in the third century B. c.—Acad., March 18.

KING RA-MER-EN, - Prof. Sayce says: I have discovered an inscription on the southern side of the Cataract, which is of considerable historical and geographical interest. It is engraved on a granite rock on the eastern bank of the Nile, opposite the southern end of the island of El-Hesseh, and is dated "the 24th day of Paophi in the 5th year of Ra-mer-en, the King of Upper and Lower Egypt." It is thus the first dated monument of this Sixth Dynasty monarch that has been found. It further describes the king as "beloved by Khnum the Great (god), the lord of the land of Ra(?)-nefer," which accordingly seems to have been an early name of the quarries of Assuan. The inscription, which is the memorial of a certain Aa-hotep, "the governor of the mountain land," goes on to state that the "chiefs" of the lands of Artht and Wawat had assembled (?) in the island of Senem, the modern Bigeh. The countries of Artht and Wawat are mentioned in the famous inscription of Una, as well as in the tomb of Hirkhuf, excavated at Assuan last year by the Crown Princess of Sweden and Norway; and the very phrase used in regard to them by Uno recurs in the text I have just found (see Prof. Schiaparelli's memoir on the Assuan text, Uno tomba egiziana inedita della VI.a dinastia, Rome, 1892, p. 26). Like Aa-hotep, Una and Hirkhuf flourished in the reign of Ra-mer-en. Dr. Brugsch has already shown that Wawat was the district on the eastern bank of the Nile which extended southward from the First Cataract; and the inscription of Aa-hotep now makes it probable that Artht was the corresponding district on the western bank.—Athenæum, Feb. 25.

NOTES BY PROF. SAYCE.—Mr. Newberry has been a little too hasty in regard to the name of Tel el-Amarna. [See also p. 566.] Norden, in 1737–8, is the first European traveller, so far as I can discover, who mentions the place, and he heard it called both Beni Amrân and Amarna. His words are "Beneamraen ou Omarne. On comprend sous ce nom une étendue de terre où sont situés quatre villages voisins les uns des autres." In fact, Amarna is the only regular Egyptian form, like Barabra from Berberi; Amran is either Bedouin or schoolmaster's Arabic. Norden is quite right in saying that the name of the Beni Amran or Amarna is applied to a district. The district extends as far south as the Gebel Abu Feda, where the monastery known to maps and travellers (including Norden) as Dêr el Qusseir or Qussûr, is known to the sailors on the Nile only as the Dêr el-Amarna. I spent some hours there copying the Greek graffiti in the quarry dedicated to Aphrodité Urania of Kusae. In a wadi immediately to the

north of the quarry I further discovered a tomb of the early period. Traces of the original hieroglyphic text belonging to it still remain, and there are three hieroglyphic graffiti in it, one of them by a scribe of Amon.

I have paid a visit to the great quarry behind Qua, in which are the curious painted representations of the god Antaeos described by M. Golénischeff in the Zeitschrift für Aegyptische Sprache, 1892. Unfortunately they were shockingly mutilated a few years ago. There are many demotic inscriptions in the quarry, but for the most part too much injured to be copied by any but a demotic scholar. In one of them the name of the god Set occurs, and two are accompanied by Greek versions dated respectively in the years 21 and 31.

Northward of the well-known tombs of Rayyâyna, and at an angle of the mountain southward of Bedarî, I found a new group of tombs, as well as a curious niche cut in the rock. Above it, and on either side of it, the stone has been carved to represent the stems of trees.

I have come across a new fortress or palace of the high-priest Men-Kheper-Ra, the contemporary of the xxi dynasty. This is close to a village called Rawâfa, about midway between Luxor and Tûd. The building was a large one, and was constructed of large kiln-baked bricks, stamped with the cartouches of "Men-Kheper-Ra, the high-priest of Amon." The building lay a little to the north of a necropolis of the Roman period, which was being excavated by the fellahin when I visited the spot in 1886. Bricks of the same size and stamped with the same cartouches are found at the old fortresses of El-Hibeh and Gebelên.

At Marashdah, opposite Dishneh, and to the south of Hau, a new burial place of the time of the Old Empire has been discovered by the fellahin. Among other objects that have come from it are some fine scarabs with the name of Pepi I of the vI dynasty.

I will only add that a hitherto unknown oasis is said to have been discovered at a distance of five days on camels from Siût, and that temples and inscriptions are reported to exist there in a good state of preservation.—A. H. SAYCE, in *Acad.*, April 8.

ASSUAN.—The SNAKE GODDESS.—Prof. Sayce writes: Six miles north of Assuan I made a careful copy of the stele I discovered there last year, as well as of the hieroglyphic graffiti round about it, which show that a chapel dedicated to the snake-goddess once stood on the spot. Another inscription which I found some way to the north of it, where the limestone crops up above the sandstone behind the village of Hindallab, states that the whole district was called "the mountain of the snake." The inscription in question is the record of a certain

Baba, who had "steered a ship with its crew" to the place, in the eleventh year of a king whose name is unfortunately not given. The inscription, however, belongs to the age either of the Old or of the Middle Empire.—Acad., March 18.

BAKLIEH AND TELL MOKDAM.—REPORT OF M. NAVILLE.—The following is the substance of M. Naville's report on his work during the winter of 1892-93:

"Travellers by railway from Mansoorah to Zagazig first reach a station of little importance called Baklieh. There they may see on their left a small mound, which is the site of one of the cities of the nome of Thoth, the Hermopolis of the Greeks. Further south, on the same side, near the village of Tmei el Amdid, are two extensive mounds, on one of which may be noticed a building which looks like a small tower, and which is a granite shrine still standing. There we began our campaign last winter, with the hope of finding, if not many monuments, at least some new inscriptions which might throw light on parts of Egyptian history which are still in nearly complete darkness; I mean especially the dynasties following the xII. I must say that in this respect our hope has been sadly disappointed.

"At Tmei el Amdid there are two very extensive mounds, separated by a valley in which there is a village. The western one, which the natives call Tell Tomai, the site of the city of Mendes, is more ancient than the other: it has the remains of the old Pharaonic temple. The southern one, which is quite as large, is covered with Greek and Roman works, remains of what may have been the governor's palace, indicated by columns which belonged to a portico, besides aqueducts and constructions which seem to have been barracks. This very large mound was covered with thousands of houses and public buildings, the majority of which are made of small red bricks, joined with the well-known white Roman cement. These bricks are of such good quality and so well preserved that they are still largely used by the natives. The neighboring villagers employ no other building material than these bricks, which are already 1500 years old.

"We settled first on Tell Tomai, close to the high enclosure which surrounded the temenos, the sacred ground on which the temple was built. The site of the temple is well marked, especially by the high monolithic shrine in red granite. The inscriptions of the shrine were first published by Burton: they merely record the names and titles of Rameses II. As the temple was on raised ground, higher than the rest of the temenos, the shrine was supported by a large basement, which consisted of enormous limestone blocks about fifteen feet high, and extending underneath the whole rectangular hall in which the

shrine was erected. This basement has been extensively quarried out, and the stones burnt for lime only a few years ago, so that the shrine stands isolated, surrounded by deep holes. In front of the hall of the shrine were two others, some of the stones of the basement being still in situ-they bear the names of Rameses II. and his son Meneptah. I cut a great number of trenches in the area of the two halls; everywhere I came across chips of stone broken and burnt for lime. The only monument I discovered is a statue now exhibited in the Gizeh Museum. It is a standing king of natural size. The material is hard limestone of Gebel Ahmar; the statue was never finished, the polish is wanting, and traces of the hammer are still visible all over the body. Headdress, attitude, emblems in the hand, are all Pharaonic. The style would point to the Saïte period; and a fragment of the same stone found close to the statue, which possibly was connected with it, suggests that it was Apries. But the head has been re-worked, the royal asp has been erased, and the whole face has been re-cut, so as to give it the appearance of a Roman emperor, who has been identified as Caracalla by Mr. Murray and Mr. Grueber from the busts in the British Museum. The dark veins of the stone and the rather rough cutting give the head a grim and ill-natured expression, which well agrees with the character of that emperor. This monument presents a curious mixture of Pharaonic and Roman art.

"Except the inevitable Rameses II., the only kings whom I came across in the excavations at Tmei el Amdid are Saïtes, A cartouche of Psammetichus II. was found on a fragment of the statuette of a priest; Apries on a stone in the temple, and on a limestone slab in the mosque of the neighboring village of Roba; Amasis on a block discovered near the shrine, which was part of a dedication to the god of the place, the ram-headed divinity, called also 'The Living Spirit,' and Seb. The vast enclosure encircled more than one building. In front of the temple, towards the north, are traces of several constructions, which may have been connected with the cemetery of sacred rams which was near the temple. In one of the mounds, on which was erected a building of that kind, was discovered a very fine capital with a Hathor head in black granite. The style of this capital was not the same as that I found at Bubastis, a specimen of which is in the British Museum. At Tmei el Amdid the type of the face is different, the nose is more aquiline; the features remind one of the profile of Rameses II. as it may be seen in some of his statues. The locks of hair are not so heavy as in the specimen from Bubastis, which I believe may be assigned to a much earlier epoch. Above the head was a little shrine, with a royal asp projecting out of it. It has the

form of those which are on the top of the musical instrument called the sistrum. The whole column, shaft, and capital represented a sistrum of gigantic proportions. A sistrum is one of the usual emblems of the goddess Hathor.

"Along the enclosure walls on the north side were the graves of the sacred rams, and in some parts the place is strewn with their coffins. Most of them have been dug out long ago and the lids broken up. Brugsch Bey, who excavated them about twenty years ago, succeeded in removing one of the lids with religious inscriptions of the time of the Ptolemies. It is now in the Museum of Gizeh.

"In the Roman mound I dug chiefly in the tombs, and found only a great deal of common pottery, large amphore, and objects of that kind without any historical or artistic interest. The most interesting place in the Roman mound is the library. It consists of a series of rectangular chambers of different sizes. All those rooms, a few of which have been cleared, were filled with papyri; it was either the library or a place for keeping the archives of the city. I should rather think it was a library, because of the size of the rolls. Unfortunately they have all been burnt, and you may see in the middle of each room the remains of the fireplace where these invaluable documents have been thrown. They are now quite carbonized, like those of Herculaneum, or even in a worse state. They are most difficult to take out; they crumble to pieces when they are loosened from the earth which covers them, but looking sideways the characters are still discernible. They generally are Greek, in good handwriting. As for those which have escaped the fire, they are quite hopeless. The moisture and the salt of the soil have reduced them to a kind of brownish paste. I tried to see whether some of the carbonized papvri well packed in cotton would stand the journey; but the contents of the five boxes which I sent to London are nothing but crumbs of charcoal and ashes. What treasures we probably have lost by the destruction of the library of Mendes!

"From Tmei el Amdid we went over to Baklieh. There is an enclosure, in the centre of which stood a temple which never was finished; for near the entrance is a heap of enormous blocks, just as they came from the quarry. Among them are two large capitals, in the form of a lotus flower. They are unpolished. Probably part only of the temple was completed, but no trace of it remains. The interest of the place centres in the necropolis of ibises, for the place belonged to the nome of Thoth, i. e., to the Hermopolite nome. The mound of the necropolis has for many years been the mine from which the fellaheen got all the bronze ibises which filled the shops of

the dealers in Cairo, as did the cats of Bubastis. Like those of the cats, the bones of the ibises were gathered together in heaps, and the bronzes thrown among them. When I first visited the mound in 1885, it was of considerable height; it has now been so thoroughly

worked that it is in certain parts level with the ground.

"The only result which was obtained in Baklieh was the determination of its Egyptian name. The geography of the Delta in Pharaonic, and even Greek times, still presents many doubtful questions. The excavations carried out by Mr. Petrie and myself have thrown light on several of them; but a good many points are still obscure. It is a subject which Egyptologists must steadily keep in view. Baklieh was the sacred sanctuary of the Hermopolite nome, and it was called in Egyptian Bah. I discovered it from fragments of the destroyed temple which are in the neighboring village, where the name is mentioned in connection with a priest of Bah. It is on a small fragment of a black basalt sarcophagus, for a priest Ahmes of the Saïte period. The coffin bore the hours of the day and night, and the title of the special priests of Thoth was 'the bald-headed.'

"From Baklieh we went further west to a mound called Tell Mokdam, not far from the Damietta branch of the Nile, between the Arab village of Sahrget el Kuba and the modern city of Mit Ghamr. Cte. Jacques de Rougé assigns to this old city the Greek name of Leontopolis; and this determination seems to have been quite justified, as the god of the city was a lion. It belonged to the nome of Athribis, now Benha. The site of the temple is still visible; but the building has been entirely destroyed, and the stones carried away. Part of it is now a cornfield, and the trenches which I cut across the area did not give any result. The work was chiefly carried on at the northwestern corner of the mound; there the fellaheen had found a short time before the base of a statue of the XII dynasty. The excavations proved that there had been a small sanctuary originally built by Usertesen III, in which Rameses II had put some of his statues, and which had been usurped by Osonkor II. Besides the base found by the fellaheen, I discovered another, a little larger, and several fragments of Rameses II, among which the lower part of a standing statue. The two bases of Usertesen III are of red limestone and very well worked. On both sides of the throne are represented the Nile gods tying the plants of Upper and Lower Egypt around the sign sām -the sign of junctions. One of these statues is particularly interesting. It has been usurped by Osorkon II, who cut his cartouches right across those of Usertesen without erasing them first; besides, an inspector, a royal secretary, wrote his name on the lower part of the

statue, and informs us that the sanctuary where the statue stood was called 'the house of Karaoma,' Osorkon's queen. It is curious that this king, who, a few years back, was hardly known except by name, came out in all my excavations; he certainly must have been one of

the most powerful of the Bubastites. "In a former excursion to Tell Mokdam, I had seen the base of a statue of the XII or the XIII dynasty which had been discovered in Mariette's time and left on the spot. This mound is important, because it bears a cartouche engraved rather carelessly over an old inscription. The cartouche is not very distinct; and Mariette, Devéria and Ebers, taking the first sign for the sign of Set, considered the oval as being that of a Hyksôs king. Ebers even reconstituted the name as being Salatis, and for the last twenty years his interpretation has generally been adopted. This valuable monument, which has been brought to the Gizeh Museum at the cost of this society, was one of the chief attractions which induced me to go to Tell Mokdam. After a careful study, and with the help of several paper casts, the name came out quite clearly. It has nothing to do with Salatis, or with any of the Hyksôs: it reads Nehasi, the negro. I consider the deciphering of this name as the most important result of the work at Tell Mokdam. It is connected in a remarkable way with a discovery made by Mr. Petrie at San. In turning the blocks of the temple, Mr. Petrie found that the royal prince, the first-born, Nehasi, had erected buildings to Set, the god of Roahtu. In both cases Nehasi is written with the pole indicating foreign nations, and I see no reason why he should not have been a genuine negro. Thus, a negro has been king of Egypt, and not by conquest, but by right of inheritance, since before his being a king, we see him called the eldest of the royal princes, the heir to the throne. If he was a negro, surely his father and mother must have belonged to the same race. The King Nehesi occurs also in the Turin Papyrus, among the kings of the XIII and xiv dynasty, and according to this document, must have had a reign of several years. This fact is very important; the statue of Tell Mokdam perhaps throws an unexpected light on a very obscure period of Egyptian history. Are we to suppose that in the long period so little known, which extends from the XII dynasty to the Hyksôs, one of the causes of the anarchy which probably prevailed at that time was invasions of the negroes? Did the Ethiopians, before the invaders from the East, succeed in conquering Egypt and coming to the throne? We have no proof of it except that nearly all the expeditions of the XII and XIII dynasties were directed against the Ethiopians, who must have been more or less dangerous neighbors; and it

is quite possible that, by a turn of fortune so often seen in the history of Eastern empires, the negroes may have had their day and have become masters not only of Upper Egypt but even of the Delta. I believe that the part played by the Ethiopians in the history of Egypt is far more considerable than we thought of; and the value of the discovery at Tell Mokdam is to give us the name of a king older than the Hyksôs conquerors, and who evidently belonged to a totally different race. It is quite possible that, instead of looking always towards the East in order to fill up the considerable gaps in the XIII and XIV dynasties, we shall have to turn towards the negroes, and perhaps some day excavations in Upper Egypt may bring us some unexpected light."—Acad., Jan. 28.

BIRBET-EL-HAGGAR.—The excavations conducted here by Count d'Hulst for the Egyptian Exploration Fund, have yielded a certain number of sculptured and inscribed slabs of considerable interest. The work is necessarily somewhat slow on account of the enormous size of some of the granite blocks, ranging up to forty tons in weight, which have to be removed; two thousand of these have already been dislodged from the mound. A few years ago the monument was used as a quarry for millstones; vast numbers of blocks were broken up, and many now remaining show on their sculptured surfaces the ineffectual attempts of the natives to split the granite. Probably for centuries previously the stones of the temple had been used for building purposes. The temple was dedicated to Isis, and the cartouches of Nectanebo and Ptolemy Philadelphus fix its date. Count d'Hulst, however, thinks that an earlier temple existed on the site, as he finds traces of older work on the interior faces of some of the granite blocks.-Athen., March 25.

CAIRO.—GHIZEH MUSEUM.—ARCHAIC STATUES.—Among the most imporof the recent acquisitions of the Ghizeh Museum are two statues (below life size) of the ancient empire, found on January 31 last at
Saqqarah. The more attractive is the figure of a seated scribe, recalling the celebrated statue of the Louvre, and not inferior to that
famous work in artistic qualities. The material is calcarous limestone, tinted red for the flesh, when the carving was completed, and
black for the hair. The eyes are of quartz, the outer lines of the lids
being in bronze, which, doubtless, originally had the tint of kohl;
even now the pupils retain the flash and brilliancy of real life. Nothing could be truer to nature than the modelling of the nude flesh; the
form is natural, yet treated with due regard to the gravity of sculpture.
In the best sense the work may be said to be typical, inasmuch as it
presents us with a perfect type of serene, highly-trained intelligence.

The scribe is seated cross-legged, and has paused for an instant, and, looking up from his papyrus, quietly regards the spectator. The work is of the fourth or fifth dynasty. One cannot help speculating how many generations it must have needed to produce that well-balanced head, and the strong, clear, methodical mind that looks out on the world with such masterful composure. Dr. Brugsch Bey has placed the figure in as favorable a light as it can be displayed, in the same room as the statue known as Sheikh-el-beled. Its height is 51 centimeters. The actual place of its discovery was in a mastaba of bricks, buried in the sand at Saqqarah.—Athen., March 4.

DEPARTMENT OF ANTHROPOLOGY.—During the past winter a new department of anthropology has been opened at the Ghizeh Museum under the charge of Dr. Fouquet. It consists of two public rooms and a laboratory. Dr. Fouquet is engaged upon a scientific catalogue of the mummies, which will be limited to those of ascertained date and history.—Acad., June 10.

CATALOGUE. - M. de Morgan has just issued a very useful little catalogue of the principal monuments exhibited in the museum. It contains some 330 pages of closely printed description and two plans, one of the rooms on the lower floor, and one of the rooms on the upper floor. It is an excellent piece of work, and every traveller and student will be grateful to M. de Morgan and to his able assistant, E. Brugsch Bey. An important section of the catalogue is devoted to the description of the mummies of kings and priests from Dêr el-Bahari, and it is now possible, for the first time, for the intelligent traveller not only to see what has been discovered during the last few years in Egypt, but also to learn something about it. Every object described in the catalogue is plainly numbered, and thus a great reproach is wiped away from the administration of the museum. In little more than eight months MM. de Morgan and Brugsch Bey have arranged and opened forty new rooms, and produced a guide to them.—Athen., March 18.

A STELE OF KHU-EN-ATEN.—A correspondent who has just returned from Egypt writes: "Behind Mr. Haton's well-known shop in the Muski at Cairo there lies by the wayside a valuable though broken stela, representing the heretic king Khu-en-aten adoring the solar disk. The proprietor has already refused two offers, but will hardly now get the £50 which the Gizeh Museum once offered for it. It was found at the foundation of a house in the Muski, and doubtless came from Heliopolis."—Acad., March 25.

DEYR EL-BAHARI.—Excavations by the Egypt Exploration Fund.—We quote the following statement of M. Naville: "For the first time

since the Egypt Exploration Fund has existed, the society has received permission to excavate one of the temples of Thebes. It is an urgent duty for me to express my gratitude to M. de Morgan not only for having granted to the society one of the choicest spots in Egypt, but also for having considerably facilitated my work by lending me a tramway. It is absolutely necessary to have one in such a place, where the débris have to be carried to a considerable distance, in order to be quite sure that nothing of interest is being hidden in the course of the work.

"All travellers who have been at Thebes know the majestic cliff, in the form of an amphitheatre, at the foot of which is Dayr el-Bahari (the Northern Convent), known by the name since the Copts built a convent over the ruins of the old sanctuary. The temple is quite different from all others in Egypt, being built in successive terraces, the highest of which leans against the mountain on its northern and western sides. The length of the temple was much greater than its width; the sanctuary was a rockcut chamber, in the axis of the building, and

opened on the upper terrace.

"Mariette first excavated the temple. Following the central avenue which leads to the sanctuary, he cleared a great part of the southern side, throwing over on to the northern side all the rubbish which he could not get rid of. The most important part of his discoveries consisted of the supporting wall of the upper terrace, with sculptures depicting a naval expedition to the land of Punt; the rockcut sanctuary of the goddess Hathor, where the goddess is seen in the form of a cow, suckling a young queen, Hashepsu, or Hatasu as she is incorrectly called; and the great hall of offerings. On the northern side, Mariette, and after him M. Maspero, dug out part of the portico at the foot of the upper terrace, and a small sanctuary corresponding to that of Hathor, which was found full of mummies of recent date.

"I settled near Dayr el-Bahari at the end of January, and started work at once in the part which Mariette had left untouched and covered with mounds of rubbish. I began with the upper terrace. I was obliged, owing to the steep slope, to establish two lines of tramway, the upper one carrying the rubbish to a short distance, the lower one taking it a long way off, to what is called the birket, a large depression used in former times as a claypit. Though I could not work so long as I wished, having been stopped by the fast of Rhamadan, the excavations led to important results. I cleared completely the northern half of the upper terrace, the description of which was quite unknown, and which is separated from the rest by a stout wall preserved only in its lower part. This wall, in which there are two doors, is the

southern limit of a part of the building, having a decidedly funerary character. I suppose it was connected with the burial-place of Thothmes I, which is perhaps somewhere in the neighbourhood.

"The western door leads to a long hall, with well-preserved sculptures of gigantic proportions, showing Hatasu and Thothmes III making offerings to Amon. Next to it is an open court limited on the north by the mountain, on the east by the remains of a chamber with columns. From that court one enters into a small rockcut chapel, the funeral chapel of Thothmes I. The ceiling, well painted in blue with yellow stars, is an Egyptian arch. The heretical king, and after him the Copts, have scratched out the figures of the gods Osiris, Anubis, &c.; but the king is well-preserved. He is seen there with two different queens: one of them, Athmes, is well known, the other one, Senseneb, so far as I know, has not yet been met with. An iron door has been put to the chapel by the authorities of the Ghizeh Museum.

Just before the door of this chapel is a building unique of its kind among Egyptian temples. It is a great square altar in limestone, to which access is given by a flight of steps. Until I discovered the staircase, I was in doubt as to the nature of the building. I thought at first that it might be a mastabat, the construction which covers the tombs in the Old Empire. The people who plundered the temple in ancient times evidently had the same idea, for they pulled down one corner of it in order to see whether it concealed a pit. All my doubts were removed when I could read the inscription. It says that a royal person-who is clearly Queen Hatasu, though her name is hammered out—"built a large altar in white stone to her father, Ra Harmahkis"; meaning perhaps her deified father, Thothmes I. The altar is a platform, 16 feet by 13 feet and 5 feet high, with ten steps leading up to it. It had a low parapet like the terraces, in order to prevent the offerings from falling into the court, and probably there was a smaller altar in hard stone placed on the top. It is the only altar of this kind known in Egypt. Mr. John Newberry, who, as an expert in architecture, gave me most valuable assistance, put back again some of the stones that had been thrown down by the plunderers; and, as all the blocks seem to be there, we hope to be able to restore the altar next

"Another object, also unique, I found on the terrace above the chambers excavated by M. Maspero. It is one of the sides of a large shrine of ebony, more than six feet high, erected by Thothmes II. Ebony never being found in large pieces, the whole panel is made of small fragments held together by ebony pegs, which have been used

with the greatest skill as part of the sculpture. This shrine was erected by Thothmes II, who says in the inscription that it was made of ebony "from the top of the mountains" in honor of his father, Amon. But everywhere the figure of Amon has been cut out with a knife, evidently by the heretical kings. It is the same with another part of the shrine which I discovered close by, a leaf of the folding door which closed it, which has rings of bronze for the bolt. It was a very difficult and delicate task to lift out the panel and to pack it, without running the risk of seeing the whole thing falling to pieces, as ebony is a very heavy wood. However, we succeded in removing it without the slightest injury from the terrace where it had been lying for many centuries. It was encircled in a double frame and carefully packed in a box, made under Mr. Newberry's supervision. It is now on its way to the Ghizeh Museum, where it will have to be repaired by a skilled cabinet-maker before being exhibited.

"The Copts who built their convent over the temple have practised the most ruthless destruction among the very beautiful sculptures which adorned it. They have scattered all over the building parts of a most interesting scene which I believe belonged to the lowest terrace. Some of its fragments are built into walls, others have been used as thresholds or stairs, others piled together with capitals and bricks in the clumsy partitions which they raised between the rooms of the convent. I carefully gathered and stored all the blocks I found belonging to that series which represented the transportation of obelisks and other heavy monuments. The most interesting of these blocks shows an obelisk lying on a high boat, where it has been placed by means of a sort of sledge on which it still rests. The high boat is towed by a small one rowed by several men. Unfortunately, the block is small; we see only the top of the obelisk, but we may hope next winter to find the remaining parts. It is the first time anything has been discovered relating to the transportation of obelisks.

The last thing I found is a very curious inscription concerning the birth of Hatasu and her accession to the throne. It is on the supporting wall of the upper terrace. We see the god Anubis rolling an enormous egg and goddesses suckling the young queen; further we come to her enthronement by her father. Thothmes I is seen in a shrine, stretching forth his hands towards a young man, who is the queen. The young man is hammered out, but still discernible, as well as the long inscription which accompanies the pictures and which relates how Thothmes called together the grandees of his kingdom, and ordered them to obey his daughter. There is an obscure allusion to his death, and a description of the rejoicings when she

ascended the throne. The date, I believe, may be interpreted in this way: that the first of the month Thoth, the first day of the variable year, and the beginning of the seasons, or of the natural year, fell on the same day.

This short summary shows how rich a place is Dayr el-Bahari, and how much we may expect from further excavations, which I hope will be resumed in the autumn. I must add that in the rubbish I found a great many Coptic letters written on potsherds or on pieces of limestone. They contain the correspondence between certain monks called Victor, John, Abraham, Zachariah, etc. They usually begin with a salutation, and sometimes with the formula: "In the name of the Father, of the Son, and of the Holy Ghost." These letters have all been sent to Europe, and are the property of the Fund.—Edulard Naville, in Acad., July 1.

EL-KAB.—Mr. G. Willoughby Fraser contributes to the Proceedings of the Soc. of Biblical Archeology (vol. xv, p. 8, 1893,) a note on his visit to El-Kab during the past winter. Among the inedited inscriptions which he copied are the following: (1) an important graffito of the vi dynasty, whose chief interest lies in the fact that it appears to point to there having been a temple near here as early as the VI dynasty. The date appears to be year 2, the third month of Pert, the fifth day of the month. No king's name is given, but, as the proper names are confounded with that of Pepi I, it perhaps refers to his reign. (2) On a large free-standing rock, with many names and titles of the vi dynasty surrounding it, is a square tablet bearing the name of a king who is only known by two other examples: he appears to have been called Saradudumes, and his name is followed by "Khâm-aas, the amanuensis of the son of the sun Dudemes." There follows a list of titles and names which, with few exceptions, belong to the vi dynasty or thereabouts. A graffito of the xviii dynasty is interesting as it was cut by or for a man named Next who lived under a queen, perhaps Hatshepset.

In visiting the tombs one of the vi dynasty was noticed which had previously been overlooked. It was never entirely finished and has now fallen in, but the finished part shows the roof cut to represent the half-round under sides of the rafters of a wooden roof. Mr. Fraser states that as far as he is aware the only other example of this occurs in a tomb of the v or vi dynasty at Tehneh (owner's name destroyed). The roof was supported by columns, one of which has a finished capital with twenty-three (?) fluted sides, bound with five bands below, representing no doubt a palm. It is very unlike the rough capitals of the same age at Sheik Said, and is interesting as one of the

earliest examples as yet known. During this year a sphinx in white marble limestone from El-Kab has been set up in the museum at Ghizeh; it is identical in style with the black sphinxes from Tanis, which Mariette supposed to be Hyksos monuments. There is no inscription on it, original or defaced.

GEBEL ABU FEDA. -AN EARLY NECROPOLIS. -Mr. Percy E. Newberry, Mr. St. Chad. Boscawen, Mr. Childe Pemberton, and Mr. Percy Buckman arrived at Assiut in Upper Egypt on March 3, after having thoroughly explored the desert for several miles east of Gebel Abu Feda. A short distance to the south of that high range of hills, Mr. Newberry visited the necropolis of the governors of the Antaeopolite nome of Upper Egypt, who ruled during the vi dynasty, about 3800-3500 B. c. One of the tombs is of very considerable importance, as it contains numerous interesting inscriptions and paintings, which throw much light upon one of the earliest periods of Egyptian civilization. It consists of a large rectangular chamber excavated high up in the hill side; and the inscriptions mention that it was hewn for an hereditary priest named Jau, who was not merely governor of the Antaeopolite nome, but also a priest of the Pyramid of Pepi II. It is hoped that complete copies of the paintings in this beautiful and very ancient tomb will be made by Mr. Percy Buckman before the close of the present season. -Acad., March 25.

Mr. Griffith adds to the above a note recalling that these tombs were discovered between forty and fifty years ago, by Mr. Harris of Alexandria. Sir Gardner Wilkinson's MSS. of 1855 contain copious extracts from the fine scenes in the tomb of Ja-u (Dcw), and, accordingly, they are referred to by that writer in all the later editions of Murray's Guide. "The tombs, which are in two groups, behind the village Beni Muhammed el Kafūr, have seldom been visited. On my journey in 1886 through Upper Egypt with Mr. Petrie, we saw only the nearer and less interesting group, in which the quarrymen were busy at the time; but a few years later Prof. Sayce copied a valuable inscription in the tomb of Ja-u, and published it with a translation by Prof. Maspero (Recueil de Travaux, vol. xiii). The names of deities and localities in these ancient tombs are very remarkable. Complete copies and facsimiles of the fine paintings will be extremely welcome. —Acad., April 1.

GEBELEN.—Some notes on a visit to this site are given by Mr. G. Willoughby Fraser in the *Proc.* of the *Soc. of Bibl. Arch.* (xv. 8, 1893). The results of the recent excavations here by M. Grébaut were: the remains of a Ptolemaic shrine built by Ptolemy IX, containing a large basalt statue and surrounded by Ptolemaic houses in whose walls and

foundations were found several older inscribed blocks of limestone, amongst which were portions of an early temple built by Menthuhotep of the xi dynasty, whose cartouche was found in two forms. The kings whose names occur here are as follows: Dudumes vi-xi (?) dynasty; Menthuhotep, xi dyn.; Lenb-i-man, xiii or xiv dyn.; Raæuser (?), xvii, Hyksos; Hor-em-heb, xviii dyn.; Leti I, xix dyn.; Penedgen III, xxi dyn.; Ptolemy IX, Evergetes III. There is considerable doubt whether to place Dudumes in the xi or in the vi dynasty.

KOM OMBO.-Excavations by M. DE Morgan,-The following is a summary of the excavations which, during the past winter, M. de Morgan has been carrying out on a large scale at Kom Ombo, about thirty miles north of Aswan in Upper Egypt, and he has succeeded in uncovering there a temple of considerable importance. As is well known, the temple is double, and consists of a large court containing sixteen columns inscribed with the cartouche of Tiberius, and a hypostyle hall containing nineteen columns about forty feet high. The pronaos has ten columns, three chambers and two shrines; one shrine is dedicated to Sebek and the other to Heru-ur or Aroueris. The temple measures about 500 feet by 250 feet, and stands at a height of about forty feet above the level of the Nile during its low season. By the side which fronted the river there originally stood a propylon and a small temple dedicated by Domitian; on the right of this stood the mammisi. To protect the remains of the temple from the inundation of the Nile, M. de Morgan has built a huge dam of the waste stones and materials which he has found in the course of his work. The bas-reliefs upon the walls and columns are exceedingly fine, and the delicacy of the colors and the fineness of the workmanship are equal, if not superior, to the art displayed at Edfu and Phile. The inscriptions, although of a religious character, are of considerable interest, and among them may be mentioned (1) the dedicatory address of Ptolemy VII, (2) the calendar of the festivals, (3) ephemerides with the names of the deities who preside over the days of the year, (4) and the texts referring to the geography of the nomes. The remains at Kom Ombo promise to be as interesting as any of the Graco-Roman period in Egypt.—Athen., May 6.

SAKKARA.—M. de Morgan has been working this summer at Sakkara, and has discovered the largest mastaba tomb yet known. He reports having already cleared sixteen chambers and passages, covered with scenes, some sculptured, others painted. This will be opened to the public next winter.—Acad., Sept. 2.

SEHEIL.-THE FAMINE STELE.-Prof. Sayce reads the name of the king on the famous famine stele discovered by Mr. Wilbour (Journal, VI, p. 328) at Aktisanes. This king is mentioned in Diodoros (I 60), who states that he overthrew the Egyptian King Amasis or Armais, who reigned from 206 to 200 B. C. No one who has seen the inscriptions of the Ethiopian Kings Ergamenes and Azakhar-Amon, at Dakkeh and Dedod, can have any doubt that the inscription of Sehêl belongs to the same age and style as they do; and their age is fixed by the fact that these two Ethiopian kings have borrowed, in their cartouches, the title of Ptolemy IV. Moreover, the inscription of Sehêl is made to face Nubia instead of Egypt; and, as Mr. Wilbour has pointed out to me, "the Kherheb, Im-hotep, the son of Ptah," occupies the same place in the Sehêl text that he does in those of Ergamenes and Azakhar-Amon. I should add that when I was at Debod the other day I found the name of Imouthis, or Im-hotep, written in Greek letters of the second century B. c., on the back of the temple. It was engraved in the centre of the external wall, and was the only inscription (Arabic graffiti apart) which is to be seen there. If the King of the Sehêl-stele is Aktisanes, not only will the hitherto mysterious text of Diodoros be explained, but the historical character of the Sehêl monument will also be vindicated. The eighteenth year of the king's reign, in which it is dated, would naturally refer to his reign over Nubia rather than over Egypt.—Athen., Feb. 25.

WADY-HALFA.-Capt. Lyons, R.E., writes: "The more northern of the two temples on the west bank of the Nile at Wady Halfa, just north of the second cataract, was apparently built in the reign of Usertesen I, and in the xvIII dynasty Thothmes IV added a small fore-court with sandstone pillars. When excavating a part of this temple in the summer of 1892, I found, in the naos between the back wall and the altar, a part of a large stela of the time of Usertesen I. The lithological character of the sandstone, the dimensions of the stela, and the form of the hieroglyphs so strongly recalled that found by Rossellini and Champollion at this same spot in the first half of the century, that I sent the stela to Prof. Schiaparelli, of the Royal Egyptian Museum at Florence, who has confirmed my supposition. This newly found portion contains two or three horizontal lines, completing that portion of the inscription. (Brugsch's 'Egypt,' vol. I, p. 159, second edition.) The remainder is in vertical columns, and contains the titles and appointments of a high dignitary, Mentu-hotep by name. This portion of the stela is much damaged, and from 15 to 35 centimètres are still wanting at the bottom. It is dated the eighth day of the first month of the eighteenth year of the king, when the districts

of Kas, Shemik, Chasaa, Shaati, Akerkin, &c., had been subdued by Egypt."—Athen., Aug. 19.

ABYSSINIA.

EXPLORATION BY MR. BENT.—The August number of the Geographical Journal (Edward Stanford) contains a paper by Mr. J. Theodore Bent, containing the first fruits of his recent archæological visit to Abyssinia. Starting from Zula, the ancient Adulis, on the Red Sea, about twenty miles south of Massawa, he followed the old trade route to Axum. On the way he identified the sites of Koloe and Ava, which are mentioned by the Greek geographers. At Koloe there are only ruins of the Greek period; but at Ava (now Yeha) Mr. Bent was fortunate enough to discover seven Himyaritic inscriptions of the best period of Sabæan work, which have been sent for decipherment to Prof. D. H. Müller, of Vienna. He also brought back impressions of three Himyaritic inscriptions at Axum, of later date. The architectural character of the ruins at the two places is similar, though here again Ava is the earlier. At both is found the rude stone monument of Arabia (the bethel or baetyle of the Phænicians) in all its stages, from the unhewn rock to the highly-decorated monolith, leading up by numerous studies to the emblematic home of the great sun-god. At the base of the monoliths are altars, which were evidently used for sacrifice. Prof. Müller reads one of the inscriptions from Ava as "His house Awa," and connects it with the worship of Baal-awa, which is common in Southern Arabia.—Academy, Aug. 19.

Before going to press we learn that Mr. Bent's volume describing his journey in full has been published.

CENTRAL AFRICA.

ZIMBABWE.—Mr. Swan writes from Vryburg, Bechuanaland, on May 28, 1893: "A reviewer, reviewing 'The Ruined Cities of Mashonaland' in the April number of the Edinburgh Review, . . . states that I see in the ruins 'the remains of temples of Phoenician starworshippers,' although I have not once mentioned the Phoenicians in the book which he reviews, and although I have stated that I regard the temples as probably of Arabian origin. He also says 'that esoteric architecture is a modern craze.' . . . I presume that the reviewer means esoteric symbolism in architecture, and it is very easy to show that this is extremely ancient, and that it was employed at a very early period; for almost all, if not all, buildings which are temples connected with any long-established religious faith, embody some esoteric symbolism in their construction, and the altars and many

other features in our English churches have an esoteric meaning. Perhaps the reviewer has not heard of those early Brahminical books, the 'Sulvasutras,' which were written long before our era. In these are described the geometrical methods employed in constructing the plans of early Hindu temples, and in fixing the point where the sacred fire should be placed. These books alone afford conclusive evidence that esoteric symbolism in architecture is not merely modern.

"I also take exception to the remarks 'that the astronomical observations of early races were rude and simple; that the standards of ancient measurement, linear or angular, were as a rule extremely imperfect'; for, in the first place, we can hardly call an observation rude which oriented the Pyramids true north to within an error of four minutes and thirty-five seconds of arc (v. Flinders Petrie's 'Pyramids and Temples of Gizeh'); and the degree of accuracy of the Chinese observations of the meridian altitude of the sun at the solstices, which were made at Loyang about 1100 B. c., does not indicate rough angular measurement (v. letters published by Laplace in the Connaissance des Temps, 1809); while the wonderful persistence in nearly uniform length of the Egyptian cubic for long periods of time shows the careful attention paid by the ancients to standards of linear measure.

"The statement in the article that the figures on the fragment of a bowl are like Bushman drawings in style, and that it is a libel on the Phœnicians to suppose that they would have produced such work; for these figures are in a style utterly unlike any Bushman drawings which I have seen, and I have seen many, and there is no difficulty in finding many pieces of Phœnician work which are very similar to the carving on the bowl. The supposition that the great temple was a fortress, and the great tower its watch-tower, is absurd to any one who has seen Zimbabwe; besides, if the great tower was a watch-tower, what was the use of the little one? I will only add that the idea that these temples were built at a period subsequent to the Christian era is utterly unsupported by valid evidence."— Athenæum, June 24.

Messrs. Longman are going to bring out a second edition of Mr. Bent's "Ruined Cities of Mashonaland," which will contain an appendix by the Secretary of the Chartered Company describing the progress made in opening up Mashonaland since Mr. Bent's departure. As to the ruins, Mr. Boscawan and Prof. D. H. Müller, of Vienna, have furnished Mr. Bent with some suggestions that will be incorporated in the preface. Messrs. Longman will issue later on in the

autumn an illustrated volume containing a narrative of Mr. and Mrs. Bent's recent visit to Axum, the sacred city of the blameless Ethiopians.—Athenæum, July 22.

ALCERIA.

EXPLORATION NORTH OF AÏN-ZANA.—M. Graillot, member of the French School at Rome, assisted by M. Gsell, a former member of the school, has begun an archæological exploration in the district to the north of Aïn-Zana (Algeria).—Rev. Arch., July-Aug., 1893, p. 106.

CATALOGUE OF MUSEUMS OF LAMBESA.—Mr. R. Cagnat, member of the Comité des Travaux Historiques, Professor in the College of France, has been charged with a mission to Algeria in order to draw up the catalogue for the collections in the museums of Lambesa.—

Chron. des Arts, 1893, No. 11.

TUNISIA.

EARLY CHRISTIAN ANTIQUITIES.—In the year 1888 several "Backsteinfliesen" or brick flooring tiles were discovered at Tunis, says the Vössiche Zeitung, ornamented with rosettes, stags, lions, peacocks, oxen and various heathen and Christian emblems. The same paper now reports the unearthing, by Lieut. Hanego, with the help of some other officers, of a further number with decorations which are exclusively Christian. They were found under the ruins of a basilica near Haadjeb-el-Hisun. They include representations of Adam and Eve, with a tree between them, round which the serpent is coiled; Christ between two apostles, one holding bread, the other a wine-cup (the head of each of the three is surrounded by a nimbus); Abraham's sacrifice: and Christ talking with the woman of Samaria (the Saviour holds a tall cross). Their exact age is hard to determine. M. le Blant, the learned archæologist, is inclined to attribute them to the sixth century. The floor of the basilica exhibits a beautiful mosaic, representing doves drinking from a brook.—Athen., Aug. 19.

TUNISIAN TATTOOING AND ANCIENT WORSHIP.—At the meeting of the Acad. des Inscr., April 23, M. Phillippe Berger finished his communication on Tunisian tattooing, examples of which had been furnished by Dr. Vercoutre. Dr. Vercoutre had recognized as the most frequent subject the symbol of an ancient divinity, whose significance has been lost but whose type is reproduced in the traditional manner. This figure appears to be the conical image of the goddess Tanit, so common on Punic monuments. M. Berger placed before the eyes of his associates a certain number of these tattooings and noted their variations; he showed the primitive figure, sometimes reduced to a

fleur-de-lis or a cross, and again developed into an ornament of more or less capricious character. Even in ancient times the image of Tanit had undergone analogous modifications, which to a certain extent explain the variations of the form in the tattooing on the arms and legs of the modern Tunisians—Rev. Arch., July-Aug., 1893, pp. 106–107.

CARTHAGE.—EARLY PUNIC TOMBS.—At the meeting of the Acad. des Inscr., May 26, 1893, a letter from Father Delattre was read concerning his discoveries in Carthage. Punic tombs of the earliest settlement have been found, and a ditch which contained pottery and coins of the III century B. c. This discovery limits still further the ancient site. Father Delattre concludes that the town was originally near the sea and did not extend beyond the hills which surround the plain. At the Roman period the town increased in size, embraced the hills, and buried beneath its constructions the Punic necropolis which today is found beneath Roman and Byzantine ruins.—Rev. Arch., July—Aug., 1893, p. 111.

ASIA.

HINDUSTAN.

SOUTH INDIAN INSCRIPTIONS.—Part II. of the second volume of South Indian Inscriptions, edited by Dr. E. Hultzsch, epigraphist to the Madras Government, has been published. It contains the text and translation of a large number of Tamil inscriptions in the great temple of Tanjore. Most of them merely record the gift of images or offerings, the usual form being to recite that a sum of money has been lent to a village community, who are bound to pay interest in perpetuity at the rate of 12½ per cent. Some of the inscriptions are historically valuable, as supplying dynastic names, or as indicating the date of certain works of Tamil literature. The part is illustrated with facsimiles and with two photographs of the temple.—Acad., Oct. 28.

THE INSCRIPTIONS ON THE SANCHI STUPAS.—Dr. Bühler writes: "In No. x of the *Epigraphia Indica* I gave transcripts of 144 votive inscriptions from the two great Stupas at Sanchi according to impressions taken by Drs. Burgess and Führer, among which 104 are identical with documents already published by Sir A. Cunningham in his work on the *Bhilsa Topes*, and forty are new. During his late cold weather tour, Dr. Führer again visited Sanchi, in order to look for the 137 missing pieces of Sir A. Cunningham's collection, and to see if excavation of the ground around the Stupas would yield any more novelties. His success has been very remarkable. He has recovered

almost all those published in the Bhilsa Topes, and he has found a large number of hitherto unknown ones. The total of the inscriptions from Stupa No. I now amounts to nearly 400, among which 378 are legible, against 198 in Sir A. Cunningham's book; and Stupa No. II has yielded, instead of 43, nearly 100, among which 78 are legible. In addition, some statues of Buddha, with very interesting dedications, have come to light during the excavations. Most important of all is the recovery of the fragment of Ašoka's Edict, of which Sir A. Cunningham has already given two fac-similes. Dr. Führer's impressions confirm my conjectural restorations of the last lines, published in the Epigraphia Indica No. X, and they prove that the piece is the lower end of a larger inscription. It appears that the first words are not devanam piye, as they have been read formerly. The end of the first line extant and the second line contain the valuable statement that "a road or path was made for the Saingha, both for monks and nuns," which assertion agrees with the wish expressed in the last line, "that the road of the Saingha may be of long duration." It now becomes probable that the Stupa No. I existed before Asoka's time, and that the king made it accessible to the faithful, and took care to have them fed properly by his officials during their visits.

"Two other documents, one new and one given in part by Sir A. Cunningham, contain imprecations against the impious despoiler of the Stupa, "who takes away from this Kākanāva be it a rail or an ornamental arch, or transfers them to another building, sacred to the Teacher (âchariyakulam)." Such an offender is to incur the punishment of parricides, of murderers of Arhats and of spiritual teachers. The characters of these inscriptions differ but very little from those of Asoka's Edicts, and probably belong to the beginning of the II century B. c. The railing and the gates of the Stupa seem, therefore, to have been completed about this time, as I have shown on other evidence in my former article.

"Another interesting novelty is an inscription of the Indo-Scythic period on the base of a statue of Buddha, which is dated in the year 78 of the "great king, king of kings, and son of the gods, Shāhi Vāsushka." The first numeral figure is mutilated, and I owe its correct interpretation to the kindness of Sir A. Cunningham. Vāsushka seems to be a vicarious name for Vāsudeva, the third Indo-Scythic or Kushana king, whom Kalhana calls Jushka.

"Finally, there is another statue which bears an inscription, a single verse in the Sragdharâ metre, exhibiting the Nagarî characters of the x or xı century A. D. Here we have further proof that Buddhism was not annihilated in the viii century A. D. by the persecution of the

Brahmans, but continued to exist much longer, until it died a natural death, its followers being absorbed by the still more easy-going Vaishnavas, who centuries before had declared Sakyamuni Gautama to be one of the incarnations of their tutelary deity.

"It is a matter of course that the new inscriptions yield a very large number of names of persons and places, as well as other interesting information. Transcripts of the whole collection have been prepared for the *Epigraphia Indica*, where details will be given."—Acad., June 17.

ARCHÆOLOGICAL SURVEY OF THE NORTHWESTERN PROVINCES AND OUDH.—The Government of India has decreed that the archæological survey of the North-Western Provinces and Oudh shall come to an end on October 1, 1895. However, Dr. Führer is making the best possible use of the allotted time. His printed Progress Report, recently issued by the local government, proves the doing of much good work, and promises the speedy performance of much work equally good.

Fathpur Sikri.—Mr. E. W. Smith, the architectural draughtsman attached to the Survey, has been busily engaged on detailed drawings of Akbar's city of Fathpur Sikri, which the Lieutenant-Governor hopes to publish in one or more volumes on the early architecture of the Moghuls. Such volumes are badly wanted.

Mathurâ.—A monograph on the excavations at the Kankâlî Tîlâ at Mathurâ is ready for the press, and promises to be of the highest interest and value. The book will, Dr. Führer tells me, be printed in royal quarto, and illustrated with about 110 plates.

A letter from Dr. Führer contains an appeal for assistance in continuing the researches at Mathurâ which are throwing so much light on the development of Hinduism, Buddhism and Jainism: "I should very much like," he writes, "to take up the Kešava mound at Mathurâ, if sufficient funds could be obtained. Do you think that an appeal in the Academy would be of some help? I am convinced that the Kešava mound hides Vaishnava relics of more ancient date than those found in the Kankâli Tîlâ.

Rámnagar.—The partial exploration of the ruined city of Râmnagar, in the Bareli district, has yielded some surprising results. Sir Alexander Cunningham long ago correctly identified the ruins at Rámnagar with the city of Ahichchhatra, the 'Αδισάδρα of Ptolemy. Dr. Führer has now found inscriptions which show that the correct Sanskrit form of the name is Adhichhatrâ. He has also made the extremely important discovery of "a large two-storied Saiva temple, built of carved brick, and dating from the first century B. c." This is very much the

earliest brick temple known to exist in Northern India, and its discovery is "a link in the chain of evidence which enables us to trace the existence, nay, the prevalence, of Vaishnavism and Saivism, not only during the second and first centuries B. c., but during much earlier times, and to give a firm support to the view now held by a number of Orientalists, according to which Vaishnavism and Saivism are older than Buddhism or Jainism." The coins found in this temple are considered to range in date from about 178 to 66 B. c. In the same city Dr. Führer exposed a Jain temple of the early Indo-Scythic period, with statues dated from 96 to 152 A. D., and a Buddhist monastery called Mihiravihāra, dating from the middle of the first century A. D.

Sahâranpur.—Mr. Rodgers lately sent a unique specimen, obtained at Sahâranpur, of a new type of the copper coinage of Kumâra Gupta I, which has hitherto been known only from the unique coin of the Standing King type in the Bodleian cabinet.—V. A. SMITH, in Acad., Aug. 5.

THE PILLAR EDICTS OF ASOKA.—The last part of Epigraphia Indica contains a valuable paper, by Prof. Bühler, on "The Pillar Edicts of Asoka." It is based throughout upon impressions from the originals, three of which are now published in facsimile for the first time. These edicts are seven in number, several of which are repeated on more than one pillar. Prof. Bühler here prints the texts of each, in Roman transliteration, giving the several versions in parallel columns, together with an English rendering and copious notes. With regard to the three inscriptions now published in facsimile for the first time—those of Radhia, Mathia, and Rampurva—Prof. Bühler insists upon a point of great palæographical importance, which he extends also to the two Delhi inscriptions. In each case he maintains that the verbal discrepancies are so slight that they cannot be ascribed to different draughtsmen; in other words, that the copies were made from a common MS. This agreement extends to the joining of words by hyphens, and to the separation of words by intervals. The joining of words implies that they are to be construed together, while the intervals are to be regarded as marks of punctuation. From these principles, Prof. Bühler draws rules as to the permissibility of certain proposed interpretations. He further lays down some other principles, which have guided him in dissenting from his predecessors. First, he refuses to admit any conjectural emendations which involve the alteration of the text contained in more than one version, preferring to extract a meaning from the actual readings. Secondly, he argues that a full elucidation of Asoka's edicts can only be accomplished with the help

of Brahmanical literature (such as the *Rajaniti*), and by a comparison of existing Hindu customs. Thirdly, he believes it certain that Asoka had not become a Buddhist at the time when the pillar edicts were engraved. Up to the close of the twenty-seventh year of his reign, Asoka continued to preach the spread of that general morality which all Indian religions, based on the Path of Knowledge, prescribe for the people, and which is common to Brahmans, Jains, and Buddhists. This Prof. Bühler hopes to prove hereafter, in a discussion of the rock edicts.—*Acad.*, Oct. 28.

NEW ASOKA INSCRIPTIONS.—Mr. Burgess writes: "It will interest all Sanskrit scholars to learn that a new inscribed pillar or Lát has been discovered in the Nepal Tarai; which, besides the seven well-known Asoka Edicts found on the other Láts, is said to bear two new ones. It was found by Major Jaskaran Singh, a relative of the late Mahârâja of Balrampur, who made an eye copy of the whole. Dr. Führer, the energetic superintendent of the Archæological Survey in the North Western Provinces, will doubtless endeavor to secure impressions. He communicates a note on the discovery to the *Pioneer* of Sept. 15."—Acad., Oct. 14.

EARLY COINAGE OF NORTHERN INDIA.—At the March meeting of the Numismatic Society, Mr. E. J. Rapson read a paper "On the Earliest Currencies of Northern India." He pointed out that Sir A. Cunningham's recent work, "The Coins of Ancient India," supplies an amount of new information of great importance for the scientific classification of these coins. They fall naturally into two main divisions-pre-Greek and post-Greek. The indigenous pre-Greek coinage must have been firmly established for some considerable time. Its influence was sufficiently strong to modify the subsequent Greek coinages of the Kabul Valley and Northern India in two important respectsshape and weight-standard. On the other hand, coin-types as distinguished from punch-marks were very probably borrowed from the Greeks. There seems to be no reason for dating any Indian coin bearing a type before Alexander's conquest, though undoubtedly a square coinage of some description did exist before that time. With regard to the earlier post-Greek native coinages, Mr. Rapson showed that the signs of Greek influence in them often enabled us to determine their chronological sequence. Relying to a great extent on arguments derived from this source, he suggested a chronological arrangement of the coinages of Taxila, Mashura, and other native states.-Athen., March 25.

THE CURRENCIES OF THE HINDU STATES OF RAJPUTANA.—William W. Webb's book with this title appears to be the first book that has

been published about the coins of the Native States in India. The whole subject, indeed, is involved in the utmost obscurity. No official information seems to be available as to how many chiefs possess this attribute of sovereignty, and how many actually exercise the right. In Rajputana alone sixteen States now coin silver and five of them also gold. Only one State, that of Alwar, has consented to allow its rupees to be made of the British standard and at the Calcutta mint. These bear—on the obverse, the head of the Queen, with the words "Victoria Empress" in English; and on the reverse the name of the reigning chief, with the date anno domini, in Persian characters, and round the border, "One Rupee, Alwar State," also in English, with the national emblem of a *jhar* or branch twice repeated. Elsewhere the coins are all struck, or rather hammered, by hand, according to the method that prevailed in England down to the reign of Elizabeth; and as the die is much larger than the coin, only part of the inscription is usually to be read on each piece. Despite traditional claims to greater antiquity, it seems to be historically ascertained that no rajput coinage goes back beyond the decadence of the Mughal Empire; in fact, to the very period when the East India Company first acquired the right to set up a mint at Calcutta. Were other evidence for this wanting, it might be inferred from the fact that the early inscriptions are always in the name of the Mughal emperors, as were those on the English sikka rupees. It is interesting to know that Persian has so long survived on the coins of Northern India, just as Greek did on the coins of the Indo-Scythic kings, and as Latin does in this country to the present day. Coins are the most conservative things in existence: hence their interest from the historical point of view, as has been so ably pointed out by Mr. C. F. Keary. Most of the chiefs of Rajputana now place the Queen's name on their money, though still in Persian characters. From an archæological point of view, most interest attaches to the old currency of Udaipur or Mewar. One tradition would assign to its chiefs a Persian origin; and this would seem to be supported by the large number of coins of the Indo-Sassanian type still to be found in the country. Indeed, copper pieces of this archaic type, in a very debased form, are still current in the bazars; and Dr. Webb gives reasons for believing that one of the copper coins issued to this day at the Udaipur mint is descended from the same stock. There is another interesting series of silver coins in Udaipur, bearing no inscription whatever. The same die is used for all pieces, from the rupee to the one anna. As regards Jodhpur or Marwar, the second State in Rajputana, the historical connection of the ruling family with the valley of the Ganges is attested by the

number of coins of the Kanauj type which are still in circulation.— Acad., Sept. 23.

RECENT FINDS OF COINS.—A recent number of the Proceedings of the Asiatic Society of Bengal contains reports by the philological secretary (Dr. A. F. R. Hoernle), upon twelve finds of old coins in Northern India, under the Treasure Trove Act. In almost all cases, the coins were of no particular rarity. We may, however, mention one find, near Delhi, of no less than 320 gold mohurs of Akbar, Jahangir, Shahjahan and Aurangzeb, which were forfeited to Government because the finders had attempted to conceal their discovery. numismatic point of view, the most important lot is a number of silver coins which came to light after a landslip in the district of Kangra. Of these twenty-one were pieces of the so-called Bactrian king, Apollodotus II, who reigned in the Punjab about 150 B. c. Four varieties are represented, all of which are to be found in the British Museum. The others, fifty-four in number, belong to the kuninda class of King Amoghabuti, who ruled in the hill districts on both sides of the Satlej at about the same time. Here there are three varieties, one of which—bearing a svastika beneath the legs of a deer—seems to be unpublished. The others have been described and figured by Sir Alexander Cunningham.—Acad., July 29.

In a subsequent number of the same Proceedings, Dr. Hoernle reports on the following finds of treasure trove coins: A collection of 183 copper coins, found in Chanda District of the Central Provinces, of the early kings of the Andhra dynasty (78-170 A. D.). They bear on the obverse an elephant with a rider, and the name of the king in ancient Nagari characters; and on the reverse four balls joined by lines crosswise, the well-known symbol of Ujain. A collection of 52 coins—one gold, the others of mixed metal-found in Sarangarh State of the Central Provinces, of the Kalachuri dynasty of Chedi (1090-1170 A. D.). They bear on the obverse a standing figure of Hanuman, and on the reverse the name of the king in large Nagari characters-in both cases enclosed within a marginal circle of dots. Coins of this dynasty are exceedingly rare, and all those known hitherto bear the four-armed goddess Durga. The present find not only includes coins of two kings before unrepresented, but also shows that the figure of Hanuman was imitated by the Chandel kings from the Kalachuri dynasty. Dr. Hoernle further comments upon two rare gold Gupta coins, added by Mr. Rivett-Carnac to his collection recently purchased by the Indian Government: one a specimen of the "swordsman" type of Kumara Gupta I, of which only two more are known to exist-in the British Museum and the Bodleian; the

other a specimen of the "umbrella" type of Chandra Gupta II, of which seven more are known. Both of these have a gold loop soldered to the rim, showing that they were once worn as amulets or ornaments.

ARCHÆOLOGICAL TOUR IN BURMAH .- The index number of the Indian Antiquary for 1892, which has just been published, contains an illustrated article by Taw Sein-Ko, giving an account of an archæological tour through the Talaing country of Burmah. His main object was to report upon the sculptured caves, the pagodas, the inscriptions and other antiquities of this region; but he also gives some interesting information about the people and their language. Mun or Talaing is still a spoken language, though rapidly disappearing before Burmese. It is taught in the monastic schools, but not in those which receive aid from the government. Not only are there many inscriptions in Talaing, but also a large mass of literature in MS., which has never been studied by scholars. There is said to be a fine collection in the royal library at Bangkok, for the country was under Siamese rule in the xiv century. The language of the Taungthus, or highlanders, though it has borrowed largely from the Shans, seems to have natural affinity with Burmese. It also possesses a literature of its own, written in a character resembling that of Talaing. The general result of Taw Sein-Ko's researches is to suggest a closer connection between Burmah and India than has hitherto been admitted. Some of the smaller objects of antiquity discovered by him are now in the British Museum. Among them is a terracotta tablet bearing a Sanskrit inscription, exactly similar to other tablets which have come from Buddha Gaya.—Acad., Sept. 23.

PHŒNICIAN ORIGIN OF PRIMITIVE TOMBS.—The annual report of the Indian surveys for 1891–92 contains some matter of archæological interest, in an appendix by Colonel Holdich on the history and ethnography of Makran, or Southern Baluchistan. From Mr. Theodore Bent's researches in the Persian Gulf, and his identification of the Bahrain Islands with the early home of the Phœnicians, Colonel Holdich is inclined to seek a Phœnician origin for the remarkable dambs, or rough stone-built tombs, which exist in many parts of the country. He also states that the ghorbastas, or great stone embankments, show the same skill in uncemented masonry as the walls of Zimbabwe; while around the cities of Tiz and Pasni are to be found the same extraordinary wealth of relics in celadon, china and Persian pottery as are described by Mr. Bent among the African ruins.—

Acad., Aug. 5.

THE BUDDHIST WHEEL OF LIFE .- The latest issue of the Journal of the Asiatic Society of Bengal for 1892 contains a paper on "The Buddhist Pictorial Wheel of Life," by Mr. L. A. Waddell, to whom we have been previously indebted for other interesting contributions on Buddhist archæology and modern Tibetan usages. The wheel of life, or cycle of existence (in Tibetan, Sid-pa-i Khor-lo; in Sanskrit, Bhavachakra), is one of the most familiar frescoes that adorn the interior of Lamaic temples, though apparently it has never been adequately described by European scholars. It depicts, in symbolical and realistic form, the fundamental doctrine of metempsychosis, which is not known to appear on the Buddhist sculptures of India. But Mr. Waddell here claims to have identified it on one of the cave paintings of Ajanta, hitherto thought to represent a zodiac. Of this, which is now sadly mutilated, he gives a photograph; as also a photograph of the common Tibetan picture, together with an explanatory diagram. The picture is sometimes on so large a scale as fifteen feet in diameter, and it forms the daily texts of sermons by Lamas to the laity. Its object is to present the causes of re-birth in so vivid a form that they can be readily perceived and overcome. "It consists of a large disc, with two concentric circles, the circular form symbolizing the ceaseless round of wordly existence. The disc is held in the clutches of a monster, who typifies the passionate clinging of wordly people to wordly matter. In the centre are symbolized the three Original Sins, and round the margin is the twelve-linked chain of Causes of Re-birth, while the remainder of the disc is divided by radii into six compartments representing the six regions of re-birth... In the upper part of the region representing hell is the Bardo, or state intermediate between death and the great judgment. Outside the disc, in the upper right hand corner, is a figure of Buddha pointing to the moon [with a hare in it]; and in the left hand corner a figure of Chenresi [Sanskrit Avalokita], the patron god of Tibet, incarnated in the Dalai Lama." Mr. Waddell goes on to give, from the traditional explanation of the Lamas, a full explanation of the symbolical meaning of all the objects figured, which, as he says, must prove valuable to students of Buddhist philosophy. It is certainly curious reading when compared with the newly-discovered Apocalypse of Peter and also with the Book of Enoch. It must suffice to say that he seems to have been successful in identifying nine out of the twelve Causes of Re-birth with portions of the Ajanta picture. In the centre of this latter he would find illustrations of some of the more celebrated of the mythical former births of Buddha himself, as contained in the Játaka tales.—Acad., March 25.

PABHOSA (NEAR).—EARLY INSCRIPTIONS.—The last number of Epigraphia Indica contains the conclusion of Dr. A. Führer's account of several early inscriptions recently found by him in a Buddhist cave near Pabhosa, some of which may go back to the II century B. C.; also a fresh edition, from a more complete impression, of an inscription previously edited by Prof. Buhler; and a number of modern Mohammedan inscriptions from Behar, edited by Dr. Paul Horn.—Acad., Oct. 28.

TIBET.

exploration of tibet.—We condense from Part II. of the Journal of the Buddhist Text Society of India the following report of a speech delivered by Sri Sarat Chandra Das at the first general meeting of the society:

"During my residence in Tibet in the years 1879, 1881 and 1882, I had the honor of being the guest of the chief spiritual minister and tutor of the Grand Lama of Tashi-lhunpo. It was at his invitation that I visited Tibet. The principal objects of my journey were: (1) To investigate the literature of Tibet, both sacred and secular; and (2) to explore the unknown parts of the country hitherto considered as terra incognita by geographers. The country lying on the north of the Himalayas, east of Ladak and west of the province of Tsan-including Lake Manasarovara, the Kailas mountains (the glaciers of which form the head-waters of the Indus, the Sutlej and the Brahmaputra or Tsangpo), and the great lake called Nam-tsho or Tengri Nor -were explored by the late Pandit Nain Singh. The country known as Northern Tibet, including Amdo-situated to the south of the great desert of Kobi, and north of Lake Tengri Nor - was explored by the late General Prejevalsky. Eastern Tibet, including Kham and Bathang, and extending to the confines of China, was first explored by Pandit Krishna Singh, and lately by Mr. Rockhill, secretary to the American Legation at Peking. But although these eminent persons had explored the outlying provinces of the country and made considerable additions to geography, yet Tibet proper, containing the great provinces of U'Tsan and Lhobra, remained yet unexplored. In the course of my travels I explored the first, together with that most interesting lake called Yamdo or Palti, in a scientific manner. My companion and friend, Lama Ugyan Gya-tsho, explored the province of Lhobra six months after my return from Tibet.!

"The minister possessed the largest collection of Sanskrit and Tibetan works of all kinds of any private gentleman in U'Tsan, though inferior to the principal university libraries of the country. The state library of Tashi-lhunpo, located in the Grand Lama's residence, is one

of the largest in Tibet. But as no one was allowed to enter the sanctum except for the purpose of paying reverence to the Grand Lama. I did not venture to visit his library. But I did visit the ancient libraries of Sakya, Sam-ve and Lhasa, which are filled with original Sanskrit works brought from India. The library of Sakya is a lofty, four-storeyed stone building of great size, erected about the middle of the XII century. It was there that the monumental work of Kshemendra, called Kalpalata, was translated into Tibetan verse by order of Phagspa, the grand hierarch who converted the Emperor Khublai to Buddhism. I visited the great monastery of Sam-ye, which was built in the beginning of the VIII century, after the model of the Odanta Puri Vihara in Magadha. The library, when I saw it. contained comparatively few books. But I was told that the largest collection of Sanskrit books in Tibet existed here down to eighty years ago, when the library was destroyed by an accidental fire. The library of the Dalai Lima at Lhasa is now considered the largest of all. It was there that I obtained Kshemendra's Kalpalata.

"The Tibetans derived their alphabet as well as their literature from India. The form of Nagari used in Magadha during the VII and VIII centuries A. D. bears a striking resemblance to the Tibetan alphabet. Nagari has undergone considerable changes; but the Tibetan characters have remained fixed from the time of their introduction until now, owing to the use of the stereotype block in printing since the beginning of the IX century. In India printing was unknown until the arrival of the English: hence the various phases noticeable in

Nagari.

"Two forms of character, differing very slightly from each other, have been in use in Tibet: one is called the U-chan (that is, with the head-line or matra); and the other U-me (without the head-line). The latter form is used in business, correspondence, &c.; the former in printing and in preparing MSS. for books. It is very curious that running hand, which is an outcome of the U-me, has not undergone

much change in course of time.

"The Tibetans translated all the Sanskrit works they could obtain from India and Nepal into their own language, and thereby enriched it. Upon these they founded their own literature, which, as translated works increased, grew richer and more comprehensive. During the xiv, xv and xvi centuries, when Buddhism became extinct in India, the literary activity of the Tibetans received a fresh impulse from the Chinese, under the dynasties of the great Khan and the Ming Emperors. During this period Chinese Buddhist works were largely translated into Tibetan. In this manner the capability of the

language to express foreign terms and ideas became enlarged and its literature abundant. The Tibetans borrowed from China what they had not been able to obtain from India.

"The wise policy of getting every foreign book translated into Tibetan, first initiated by King Srong-tsan in the beginning of the VII century, was followed by his successors down to Ralpa-chan, and also by the successive Lamaic hierarchies which ruled over Tibet. With the translation of the works of the Indian saints, their spirits also had been transferred into the country of Himavat; hence we now find so many incarnations of Indian Pandits at the head of the great monasteries. It is a noteworthy fact that in the chief Lamasarais, biographies of many illustrious Indian Buddhists may be found stereotyped on wooden blocks. The Tibetans are very fond of recording the events connected with their lives. In the grand monasteries presided over by incarnate or erudite Lamas, the duty of writing the diary about the Superior (Lama) is entrusted to a learned monk. After the death of the Lama, his biography is compiled from this diary. It is owing to this that printed biographies of the Lamas of the chief monasteries can be had in the bookstalls of every market in Tibet. It is mentioned in the historical and legendary books of Tibet that most of the Lamas, who now appear there as incarnate beings, formerly belonged to India, and particularly to Bengal. Owing to this, the name of Bengal is revered all over Tibet and Mongolia."—Acad., Sept. 9.

CHINA.

CHALDEAN AND EGYPTIAN TREES ON CHINESE SCULPTURES. - M. Terrien de Lacouperie writes: "The foreign notion of the calendar tree was current in Eastern China at the time of Leihtze, 400 B. C., if not before, . . . this fabulous conception was part of the foreign notions and ideas which were introduced by the traders of the Erythrean Sea, in the emporia of Shantung (680-375 B. c.), described at length in our researches on The Western Sources of the Early Chinese Civilization. . . . A recent work, splendidly illustrated, on La sculpture sur pierre en Chine au temps des deux dynasties Han, by Mr. Ed. Chavannes of Peking, gives us the opportunity of returning to the subject, because it involves a most interesting question in the history of Chinese art. The principal sculptures are those of a funeral monument erected in 147 A. D. by the Wa family in Kiasianghien of South Shantung province. . . . Not only the calendar plant, but four other figures of different sorts of wonderful trees that occur on these sculptures." (1) On Pl. xvIII is the calendar plant with its fifteen pods, and near

it a man with his hand raised to the tree—a scene reminding of the Assyrian tree of life and its genius. (2) On the same plate an exotic plant with crooked stem and six offshoots or leaves. (3) Pl. via and XVIII. The tree for friendliness; a much intertwined plant. (4) Pl. XVIII, 2. A conventional representation, doubled, of the date palmtree as represented on the Assyro-Babylonian cylinders. The resemblance is so complete that it cannot be doubted that the original came from the Persian gulf. (5) Pl. v, 2; x, 1; xx, 1. A large fanciful tree, called Hoh-hwan. The sculpture represents a combination of the Egyptian lotos pattern with another tree, which seems to be the Egyptian Persea. Three among these five—the calendar plant, the date-palm tree, and the lotos and Persea tree, are evidences of western influence over Chinese art. There are other evidences of this same fact. Such are: (1) The headgear from a special arrangement of the horns of a demon (pl. xxi: cf. Perrot, fig. 277); (2) the implement carried by a human figure (pl. 1, 2: cf. Perrot, fig. 250); the Tombthumb star over the Mizar star of the Great Bear, which is unknown in Chinese uranography (pl. xxxII), etc.

It is evident that these resemblances are the result, not merely of oral communications to Chinese artists, but of personal acquaintance with foreign monuments, although the imitations are curiously distorted.—Babylonian and Oriental Record, June, 1893.

MONCOLIA.

A CHINESE INSCRIPTION FROM MONGOLIA.—Prof. Schlegel publishes in the Journal of the Finno-Ougrienne Society of Helsingfors an article entitled "La Stèle funéraire du Téghin Giogh, et ses Copistes et Traducteurs, Chinois, Russes, et Allemands." The subject of it is the inscription on a monumental pillar or tablet erected by order of the Emperor Hsüan Tsung of the Thang dynasty of China in A. D. 732, in honor of the Prince Giogh, brother of the then chief or khan of a Turkish tribe, which occupied a considerable portion of what is now included in the general name of Mongolia, north of the Thien-shan mountain range. The tablet was discovered in 1890 by Prof. Heikel of the Helsingfors University, in the valley of the Orkhon, a tributary of the Selenga, which finally flows into Lake Baikal. There were many monuments in the valley, some in Chinese characters and some in Runic (?). This one of the Prince Giogh was, perhaps, the most striking of them; and Prof. Heikel carried back with him to Helsingfors several photographs of it. It is in twelve columns of Chinese characters, amounting with the title and date altogether to 425, which are mostly in good preservation, only three being obliterated, and ten

others blurred or mouldered. It must be considered one of the most interesting discoveries of our time, carrying us back nearly twelve centuries, and bringing us face to face with a well-known emperor and the tribes on his northern frontiers, and the soothing cajoleries by which their wild chiefs were kept in order. It is strange that so fine a monument should have escaped the notice, so far as we know, of Chinese antiquaries. The great collection of inscriptions published by Wang Ch'ang in 1805 contains more than 100 of the reign of Hsüan Tsung, but this important one from the valley of the Orkhon is not among them. It is not so much, however, to the monument itself as to the difficulties that have been found in the interpretation of the inscription that it is desired to call attention in this notice. The photographs of Prof. Heikel were naturally referred from Helsingfors to St. Petersburg, and what purported to be a correct copy of the inscription on them, but was not so, was procured from the Russian Mission at Peking, and a translation of this defective copy was made by a Sinologue at the Consulate of Ourga. Subsequently Prof. Heikel obtained another translation of his photographic copies from Prof. Georg v. d. Gabelenz, of Berlin. The Finno-Ougrienne Society published a superb volume, containing the original photographs, the copy of the inscription taken from them at Peking, and the Berlin translation, and presented it to Prof. Schlegel, who responded with a new translation, and this article, which has been republished by Mr. Brill, of Leyden.

Prof. Schlegel's description of the monument is conducted with the greatest pains and with much critical skill, and the general meaning of the inscription may be considered as finally determined. He has exposed the errors of the German translation with a bold decision, but not in a carping spirit. It may be possible to point out some flaws in his own version, and in his proposals to replace the blurred characters; but the scope of the record cannot be misapprehended again. The relations between the government of China and the rude tribes on the north, before what we call our "Middle Ages," stand out clear and distinct.—Acad., Jan. 28.

ARABIA.

HUBER'S TRAVELS IN ARABIA.—Journal d'un Voyage en Arabie, 1883—1884. Par Charles Huber. (Paris: Leroux.) This large and handsome volume, well worthy of the traditions of the National Printing Press of France, possesses a melancholy interest. It is a careful publication by the Asiatic and Geographical Societies of Paris of the journal kept by the young and enthusiastic savant and explorer,

Charles Huber, up to the date of his murder between Jedda and Medineh. The editors have confined themselves rigorously to the reproduction of his manuscript: the numerous inscriptions he copied have been printed without any attempt at correction or explanation, and the Arabic names and words he wrote down have also undergone no revision. But the volume has been enriched with very substantial additions at its end. These consist of numerous and elaborate maps, illustrating the journeys of M. Huber from Damascus and Palmyra in the north to the neighborhood of Mekka in the south. They increase materially our knowledge of the Arabian Peninsula, and, in connection with Mr. Doughty's travels, make it possible to understand not only what is the present condition of the northwestern part of the country, but also the position of the chief seats of its ancient culture. It is, however, from an epigraphic point of view that M. Huber's journal is so specially important. The scientific mission on which he was sent by the French Government had, as its first aim, the discovery and reproduction of the historical monuments of the past. That inscriptions existed in what is now a barren land inhabited for the most part by illiterate nomads was known, and Mr. Doughty's discoveries had shown that in the neighborhood of Teima were numerous remains of antiquity. Among them is the famous stele of Tselemshezib in the Aramaic language and alphabet, now in the Museum of the Louvre.

During a part of his second journey, M. Huber was accompanied by Prof. Euting, and the copies of the inscriptions contained in his journal seem to have been the joint work of the two travellers. The Aramaic texts found at Teïma and elsewhere have been already published in the Corpus Inscriptionum Semiticarum; and consequently, with a few exceptions, none are given in the present volume. The inscriptions it contains are partly Safaite, partly Minæan, partly Proto-Arabic, partly Nabathean. The inscriptions of Safa were first deciphered by M. Halévy in 1877, and take their name from the volcanic region southeast of Damascus, on the rocks of which the majority of them are written

The principal fact which strikes the reader of the Journal is the wide extent of country over which the epigraphic monuments of the past are spread. Before the rise of Mohammedanism, the population of Northwestern Arabia seems to have been as much addicted to writing as were the ancient Egyptians. Inscriptions are scratched almost everywhere on the rocks and boulders of the country; and as the writers were for the most part mere travellers or camel-drivers, a knowledge of the art of writing must have been widely diffused. The

alphabets employed by the scribes show that the stream of culture flowed from two opposite directions. On the one side it came from the Aramæans of the north, on the other from the cultured and powerful kingdoms of the south. Indeed, there was a time when the Minæan kings exercised their power as far north as Teïma, and even on the borders of Egypt and Palestine; and it is therefore not surprising that the alphabets of Safa and its neighborhood are Minæan rather than Aramaic in character.

We are but just awakening to the fact that Arabia was once the seat of a high civilization and of a developed inland and maritime trade. If Dr. Glaser is right, there are epigraphic monuments in the south of the Peninsula which go back to the age of the Egyptian Hyksos. At all events the Assyrian inscriptions prove that Saba was a flourishing monarchy in the VIII century B. c., and that its power extended to the frontiers of Babylonia. If, as Dr. Glaser has endeavored to show, the kingdom of Saba arose on the ruins of that of the Minæans, we are carried back to a high antiquity for the flourishing period of the latter, as well as for the origin of the alphabet in its South Arabian form.—A. H. Sayce, in Acad., April 15.

WESTERN ASIA.

THE TREASURE-CITIES OR ECBATANAS OF WESTERN ASIA.—A rather novel subject is treated by Mr. Wm. F. Ainsworth in the *Proc.* of the *Soc. Bibl. Arch.* (xv, 8, 1893). The building of strong fortified places, either castles or citadels in connection with cities, began early in oriental history. In *Ezra*, vii. 11, the Jews sought for the decree of Cyrus and found it at Achmetha, "in the palace that is in the province of the Medes." The translators have put Ecbatana in the margin; this form, as also Acbatana, Egbatana and Agbatana, were the Greek renderings of Achmetha.

I. The Ecbatana of Greater Media.—The Achmetha just alluded to is generally identified with Hamadan, whose name appears in Syriac as Achmathana. Amadiya, the Ecbatana of Assyria, is another form of the same word.

II. The Ecbatana of Lesser Media.—Sir Henry Rawlinson seeks to prove that the present Takht-i-Sulaïman was the site of another Ecbatana, that of Atropatene, or Lesser Media; and that to it, rather than to the Ecbatana of Greater Media, the statements of Herodotos and most of the ancient accounts refer.

III. The Ecbatana of Babylonia.—Its existence depends upon the authority of Plutarch's life of Alexander, who says that the conqueror proceeded, after the battle of Arbela, through the province of Babylo-

nia to Ecbatana, where he was particularly struck with a gulf of fire, which streamed continually from an inexhaustible source. He was surprised also by the flood of naphtha not far from the gulf. Such a phenomenon is not met anywhere except at Baku and at Kir-kuk in Babylonia, or on its confines. The Arabs call the naphtha fires at this latter place $Ab\hat{a}$ Geger, and the Turks Kurkur Baba, "Father of Naphtha;" and the fires were burning brightly in 1837 when the writer visited the site. Close by there exists a town, in the midst of which rises a lofty rock, crowned by a castle of vast dimensions, only comparable to the castles of Arbela, Amadiya and Urfat. Here then, at Kir-kuk, was an Ecbatana.

The Ecbatana of Assyria.—Mr. Rich first pointed out that the castle of Amadiya—the strongest fortress in all Kurdistan—was an Assyrian Ecbatana. According to Mr. Rich, the castle retains the title of Ikbadan. This is made quite certain when we consider the vast dimensions of its castle, situated on a lofty precipitous rock, approached only on one side, its ascent protected by strong portals with colossal representations of Assyrian monarchs sculptured on the rock side. Unlike the castles of Kirkuk, Arbela and Urfah, it had not a city around it or on the plain below.

The Ecbatana of Persia.—It is in doubt whether the Ecbatana mentioned in Pliny (vi. 29) was the castle of Pasargada, in the mountains apart from Persepolis, or was the treasure citadel of Persepolis itself.

The Ecbatanas of Syria.—Gaza stands at the head of the Ecbatanas of Syria. The word means "a treasury," and was adopted into Greek: it was probably a translation of Achmetha. Pliny says that on the mountains of the promonotory of Carmel was a city of the same name, which was an Ecbatana.

The Treasuries of Parthia.—According to Isidoros of Charax, the Parthians had a Gaza or treasury at Anatho or Aratha (Ara on the Euphrates), known as Phraates Gaza. The stronghold is described as being an island. The Persians, on their side, erected under Tiridates an opposition stronghold, also on an island of the Euphrates, twelve schæni below Anatho. It is called Olabos by Isidoras, Teridata by Ptolemy, and Thilutha by Ammianus Marcellinus, and is now known as Tilbes. It defied with its strength the Emperor Julian. The passage in Tacitus (lib. xv. 31) which refers to Tiridates went by the Euphrates to the Ecbatana of the Parthian Vologeses, is explicable only by supposing it to refer to Anah.

ORIENTAL DIPLOMACY.—By Charles Bezold. By "Oriental Diplomacy" Dr. Bezold explains that he means "the transliterated text of the cuneiform despatches between the kings of Egypt and Western .

Asia in the xy century B. c., discovered at Tel el-Amarna, and now preserved in the British Museum." But it is something more than this. Dr. Bezold has prefixed to it an account of the phraseology and grammatical peculiarities of the texts, and has added a very useful vocabulary of the various words which occur in them. For the Assyriologist the book is a serviceable and handy supplement to the British Museum volume on the Tel el-Amarna tablets. The author is specially skilled in the art of cataloguing and dictionary-making, and it is needless to say that he has done his work well. It is a pity, however, that his book was finished, as we may gather from the date of the preface, too soon to allow him to profit by some of the criticisms which have been passed on the British Museum volume, and so avoid the errors committed in that work. Thus the letters from Akizzi (Nos. 36, 37) are still stated to be addressed to Amenophis III, instead of Amenophis IV; Ubi, the Egyptian Aup, is identified with the Biblical Hobah, which was in a different part of the oriental world; and the name of the city of Qatna is wrongly transliterated. Dr. Bezold gives a summary of the contents of each letter, instead of a translation, on the ground that in the present state of cuneiform research it would "be impossible to give a translation of the Tel el-Amarna texts which would entirely satisfy the expert or general reader." Had the older Assyrian scholars acted on such a principle, Assyriology would not be advanced as it is to-day. The grammatical peculiarities of the Tel el-Amarna letters have been registered with painstaking care, and will materially further our knowledge of Assyrian grammar. The vocabulary at the end of the book is excellent, and makes us wish that Dr. Bezold would do for the collections of tablets at Gizeh and Berlin what he has done for the collection in the British Museum.—Acad., Oct. 27.

BABYLONIA.

BABYLONIAN CHRONOLOGY.—The last work of the late Mr. George Bertin is printed in the new volume of the Transactions of the Royal Historical Society. It is a paper which he read before that society about a year before his death. The subject is "Babylonian Chronology and History," restored mainly from the dynastic tablets in the British Museum. The result is to confirm, to a large extent, the statements of Berosus, whose accuracy has also been supported by the researches of Prof. Sayce. At the end is a list of all the several dynasties that ruled in Babylonia from mythical times down to the Seleucidæ. Wherever possible, dates and the duration of reigns are given, and the names of the monarchs both in cuneiform characters

and transliterated. Work of this kind must always be tentative, in view of the continual discovery of new sources of information, such as those recently brought back by the American expedition to Babylonia. But this consideration affects only to a slight extent the permanent value of Mr. Bertin's labors.—Acad., Sept. 9.

The new part of Bezold's Zeitschrift für Assyriologie will contain a paper on Babylonian chronology, which Dr. Strassmaier proves to have been based upon periods of eighteen years.—Athen., June 10.

THE RAPE OF ERIS-KIGAL. - At a recent meeting of the Académie des Inscriptions, M. Joseph Halévy read a paper upon the Rape of Proserpine in Babylonian mythology. Hitherto this legend has been considered exclusively Greek, or perhaps as derived from the Egyptian myth of Isis and Osiris. But M. Halévy now claims to have discovered it on a Babylonian tablet of the xv century B. c., which was among those found at Tel el-Amarna. Nergal, the Babylonian Pluto or Hades, desires to wed Eris-Kigal (="the desire of Hades"), who is daughter of Anu, the Babylonian Jupiter. On the refusal of the father, Nergal orders Namtar, who plays the part of Hermes as conductor of the dead, to bring her by force to his palace. Eris-Kigal yields to threats, and consents to become the wife of Nergal, on condition of sharing his authority. "I wish," she says, "to share the power that you exercise: you shall be the lord and I will be the lady." The text then goes on: "Nergal approves of this, and instead of being angry, embraces her and dries her tears. 'All that thou desirest from this moment, that I will grant to thee." "-Acad., Aug. 5.

THE BABYLONIAN ZODIACAL SIGNS.—Mr. Robert Brown, jr., writes that Mr. Pinches has called his attention to a Babylonian tablet (No. 85-4-30, 15) in the British Museum which gives the twelve months and a leading star or constellation connected with each. Mr. Pinches dates it "about 500 B. c.," adding that it may be a copy of an earlier tablet, which appears to be almost certain. The tablet is thus unaffected by Greek influence, and we see that the division of the ecliptic into twelve zodiacal parts was a genuine Euphratean product, and not introduced, as Mr. George Bertin sustained, only during the Greek period, by Seleucidian astronomers. Mr. Brown explains the reading and meaning of each star or constellation on this tablet, which he calls the Tê tablet, because instead of either of the ordinary forms for kakkab=star, the form te, an abbreviation of the Assyrian temennu= Akkadian dimmenna, and meaning primarily "foundation-stone," and here "principal point" (i. e., chief star or sign), is used.—Acad., Nov. 4.

EXISTENCE OF A COPPER AGE IN BABYLONIA.—At a recent meeting of the Acad. des Sciences, M. Berthelot made a communication about some objects of copper discovered by M. Sarzec in the course of his excavations in Babylonia. The analysis of these confirmed M. Berthelot's views as to the existence of an age during which pure copper was used instead of bronze, the latter being introduced after the rise of commerce in tin. A fragment of a small votive figure, found among the foundations of an edifice more ancient than the reign of King Ur-nina, was assayed for copper and chlorine by means of nitric acid. It contained neither bismuth, tin, antimony, zinc, nor magnesium; only traces of lead, arsenic and sulphur, and 77.7 per cent. of copper, the bulk of the rest consisting of alkaline earthy carbonates and silica. Its composition resembles that of the statuette of the Babylonian King Gudea, of Telloh, and also that of the Egyptian King Pepi I, of the vi dynasty, showing that in those early times tin was not known in the two most ancient homes of civilization.—Acad., Feb. 18.

FATHER SCHEIL'S INVESTIGATIONS.—According to the Levant Herald, the Rev. Father Scheil, a Dominican, has for the last three months been employed in cataloguing the Assyrian and Chaldaean antiquities of the Imperial Museum at Constantinople. He has deciphered some cuneiform inscriptions. He is shortly to leave, with Bedri Bey of the Museum, for Abou Haba, the old Sippara. As this site is in the Crown domains, the Sultan contributes to the expense of the explorations.— Athen., Jan. 14.

BABYLON.-EARLY NAME OF THE CITY.-Rev. C. J. Ball and Prof. Hommel have published some notes in the Proc. of the Soc. of Bibl. Arch. on the early names of Babylon and Borsippa, which enable us to trace the history of Babylon back of the time when Hammurabi and his dynasty gave it the name and rank by which we know it. The old name of Babylon was Gisgalla, and that of Borsippa Kinnir, or Kinunir. Gisgalla means "door," and Ki-nir "place of the tower." An inscription of Ur-ban (c. 3750) proves the existence of Gisgalla= Babylon at this early time as a holy place. The inscriptions of the early king or patesi of Sirgurla E-anna-du mention immediately after Uruk the city of Gishgalla. A later patesi, En-timinna, has "To the god Lugal-Gishgalla (King of Gisgalla or Babel), I built the palace of his town Gishgalla." Gudea, also King of Sirpurla, mentions Du-rizuab, lady of Ki-nu-nir, as his goddess; so that we may conclude that this great prince possessed also Babel and Borsippa. Some centuries before, Hammurabi, King Sin-idina of Larsa built a canal from Larsa to Gishgalla and Tri-aku (Rim-Sin) before his overthrow by Hammurabi, "rebuilt Gishgalla-ki of the goddess Ma-sig-dug" — a striking

illustration for the time for the vassalship of Amraphel to Larsa in the days of Ariokh. A few years later Hammurabi overthrew his former patron and rebuilt the temples of Larsa. A seal published in Sarzec's Découvertes (pl. 30 bis, h° 11), gives the name E-ki-rapal-tu (or rapastu), King of Gishgalla, which is curiously like Kimtu-rapashtu, the other name of Hammurabi.

TELLOH.—SILVER VASE.—M. Heuzey writes to the Acad. des Inser., June 2, 1893, that, thanks to Hamdy-bey, director of the Museum at Constantinople, he has been able to study the remarkable silver vase found by M. de Sarzec in the excavations at Telloh, Chaldæa. By the side of the inscription, which contains the name of the patési Enténa, there is found a decoration finely incised representing in one zone an eagle with lion's head perched upon two walking lions. This design is repeated four times, as if it were the armorial bearings of this ancient dynasty. Above this zone is a narrower one, on which are represented heifers at rest. This is the most ancient example of decoration showing superposed zones of animals, a type which continued for centuries, and passed into the early stages of Greek ceramic art.—Rev. Arch., July-Aug., 1893, p. 112.

PERSIA.—Valerian and Sapor.—The Bibliothèque Nationale in Paris has recently acquired a cameo, of large size and of the finest workmanship, showing a duel on horseback between a Sassanid king and a Roman emperor. M. Babelon, the keeper of the department of coins, recognizes in the subject a traditional representation of the capture of Valerian on the field of battle by Sapor I (A. D. 250).—Acad., June 17.

ASSYRIA.

KING ADAD-NIRAR.—At the meeting of the Acad. des Inscr., on May 9, 1893, M. Oppert began the reading of a dissertation on an Assyrian inscription of the King Adad-nirar. The text, which cannot be later than 1422 B. c., contains, besides the titles and genealogy of the prince, the account of the restoration of a temple of the god Asshur on the Tigris. Oppert deplores the little progress made during the past forty years in the interpretation of cuneiform texts. He notes that this text mentions a people called Quti or Guti, whom he identifies with the Germanic nation of the Goths [!]—Rev. Arch., July-Aug., 1893, p. 114.

A BILINGUAL VANNIC AND ASSYRIAN INSCRIPTION.—Prof. Sayce writes: "I have a discovery to announce of considerable philological importance. It is nothing less than that of a bilingual Vannic and Assyrian inscription. The fortunate discoverer is M. de Morgan, the director of the Egyptian Service of Antiquities, who obtained squeezes of the

two texts at the risk of his life. These have just been published by the Rev. Fr. Scheil in the Recueil de Travaux relalifs à la Philologie et à l'Archéologie égyptiennes et assyriennes, xiv. 3, 4. The fact that they are translations one of the other has, however, escaped his notice. The inscriptions are found on the two faces of a blue stone column in the pass of Kel-i-shin Sidek. The Vannic text is a duplicate of one on another stone column in the pass of Kel-i-shin Ushnei, which I have published in my Memoir on the Cuneiform Inscriptions of Van, No. Lvi. As M. de Morgan states that the latter stone is now destroyed, the cast which was made of it for me, and which I have sent to the Ashmolean Museum, acquires an additional value. All three texts are shockingly mutilated, which accounts for the fact that Dr. Scheil did not notice that the Assyrian and Vannic versions correspond line by line with one another. Nevertheless, the Assyrian version throws a good deal of light on the Vannic vocabulary and grammar.

The inscriptions were erected by Menuas, who ruled over the Vannic kingdom in the VIII century B. c. The Assyrian version shows that the city called by the Assyrians Mutsatsir was close to the pass of Kel-i-shin Sidek. In the Vannic version it is called the City of Ardinis, "the Sun-god;" and I conclude, therefore, that Mutsatsir was a name of purely Assyrian origin, signifying "the place from which the serpent issues." The seal of the last king of Mutsa-tsir contains a reference to the *tsir* or "serpent" (Sayce, LVII.). I should add that the Vannic version seems to allude to an early king of Van otherwise unknown, called (Sar?) durazaus.—Acad., Aug. 5.

SYRIA.

TADUKHEPA'S DOWRY.—Major Conder has a note in the October number of the *Pal. Expl. Fund*, and while not feeling ready to accept his readings unquestioned, we here quote from him, as the subject is very interesting for the history of an unknown section of the ancient art of Western Asia.

"This list of presents sent to Egypt with the bride of Amenophis III is highly important, as indicating the civilization of the xv century B. c., extending to Armenia, and indicating trade with Central Asia. It is contained in the tablet numbered B 26 of the Tell Amarna collection... At the bottom of the left-hand column at the back (lines 44 to 50) the following passage occurs: 'These are the (treasures?) of the female slaves, all the things that Dusratta, King of Mitani, gives to Amenophis III, King of Egypt, his brother, his relation by marriage... for Tadukhepa, his daughter, to the land of Egypt, to Amenophis III for marriage, when he gives her he gives them.' The list begins with a pair of horses and a chariot, the whole

plated with gold and set with some kind of precious stones, and with silver, with shafts and crossbars of gold, the weight of which is stated and the details described, with the ornaments of the horses' harness. A litter for camels appears to follow, adorned in similar style, and cloths of purple and many colors, and are worked with gold, with a girdle fringed with gold, and rings of gold. Objects of bronze and of gold follow, and possibly a headdress adorned with gold, and other A (crescent?) of rubies, emeralds, and other precious stones, and an arm-band of gold and gems follow. A saddle for a horse is adorned with eagles of gold and precious stones, apparently including turquoises. In the next column is enumerated a necklace of gold and gems, a bracelet of iron and gold, with gems, an anklet of gold, and another ornament with twenty-five emeralds. Eyes of gold and rings of the same, and a collar in six rows, with other articles of gold and gems, including emeralds. The dresses include one of purple, apparently of Phænician work, and another from the city Khat; another which was green, and a third dyed crimson. Ornaments of precious stones, including emeralds, follow, and a carved throne, gilded and veneered with wood supposed to be ebony, and a bracelet of silver and vessels of copper with gold handles. The final objects appear to be chests to hold the presents—of stone.

"On the back of the tablet some object of jade is noticed, and leaves of silver and gold, with cloths for beds (or seats). A number of objects of bronze (or copper) are then enumerated, some of which belonged to a chariot; and on the right-hand column of the back boxes of strong wood (ebony?) to hold the treasures, and some object adorned with gold lions and set with emeralds, with other things of ebony, white wood, silver, gold, and gems—Phœnician robes and

others from the city Khat, and bronze objects for horses.

"Another long tablet (25 B), giving a similar list, appears to be part of the same inventory. It is much injured on the left side, but the enumeration includes earrings with gems and trinkets adorned with emeralds and other gems, which occupy the whole column. In the right-hand column we find mention of a necklace of gold and gems, and eyes of precious stones, a bracelet of gold, an anklet of gold and other bracelets, one of iron adorned with gold, and a clasp or brooch of gold and emeralds. After this, boxes to hold the treasures are enumerated, one being of alabaster and another adorned with gold. Objects of silver follow to the end of the column.

"At the back of the same tablet other objects of gold and silver come first, including an anklet and other adornments for the feet and body. On the right-hand column silver objects come first, and horns of the wild bull follow, adorned with gold, and other objects of ebony and gold. Finally bracelets and anklets of gold are described in detail, and a 'pair of earrings of gold, with pendants of emerald and stars of gold,' and as many as twelve bracelets and eighty anklets of gold, and ten silver anklets for women, with silver adornments, and twenty earrings of gold with pendants of gems.

"I am not aware that any translation of these tablets, or even an abstract of their contents, has yet been published. Those who are acquainted with the treasures found at Mycenæ and Troy by Dr. Schliemann, in the lower part of the ruins, which are supposed to be as old perhaps as 1500 B. c., will observe the resemblance between the art and material of the objects which he discovered and those which came from Armenia to Egypt. Wherever the precious metals and gems were found, jade could only be obtained in Turkestan, and white jade only on the borders of China."

RESEARCHES BY BRÜNNOW AND DOMACZEWESKI—Two Heidelberg professors, Dr. Brünow (Oriental philology) and Dr. von Domaczeweski (ancient history), intend to make a common "Studienreise" in Syria next winter. The chief end of their journey is the pursuit of archæological rearches in the country east of Lebanon and in the district of Edessa, where the two scholars hope to find valuable material for the illustration both of ancient and mediæval history.— Athen., Aug. 5.

THE PANAMMU INSCRIPTION FROM SINDJIRLI.—The famous Panammu inscription in Aramaic found at Sindjirli and now in the Berlin Museum (see Journal, vol. vii, pp. 309–313*), has been translated by Prof. Sachau in the *Mittheilungen* and M. Halévy in the *Revue Sémitique*. Mr. J. A. Craig gives a translation made before seeing Halévy's. It reads as follows:

"This statue Bar-Rekub erected to his father, Panammu, the son of Bar-Sur [in commemoration] of the year in which he escaped [the destruction which was in the house] of his father.

"The gods of the land of Ja'di delivered him from the destruction which was in the house of his father. And (certain) people arose and destroyed (?) . . . The sword (?) of destruction [they brought] into the house of his father. And they slew his father, Bar-Sur, and slew seventy, 70, of the kinsmen (?) of his father. . . . And the rest of the land filled the prisons, and they caused the cities that were laid waste to be more numerous than those that were inhabited. Then [spake the god(s) of the land of Ja'di] to the people before me (?) Ye have put a sword in my house and ye have slain one of my sons, therefore, will I make grievous the

^{*}We then placed Sindjirli in Asia Minor, but its connection with Syria, on whose borders it is, has become so evident that it should be placed under that heading.

destruction of the sword in the land of Ja'di. . . . Panammu, the son of Qaral. . . . [And it was destroyed] the grain and millet and wheat and barley and a half a measure (of each) was sold for a shekel, and a quarter of a shat of vegetables for a shekel, and an asnag of wine (drink) for a shekel. Then brought my father Pan[ammu wine] with presents to the King of Assyria. And he appointed him king over the house of his father. And he emptied the prisons and set free the captives of [the land of] Ja'di . . . and he set free the women who were in the prisons. . . . [He rebuilt the house] of his father and made it more beautiful than before. And wheat and barley and grain (?) and Choroth were multiplied and there was food in abundance . . . its price was diminished (?) And in the days of my father, Panammu, he appointed men lords of Kefiri and lords of chariots and my father, Panammu, caused them to go upon the highway(s?) of the Kings of Kbr . . . my father was not a lord of silver and not a lord of gold (=was not rich in silver and gold). In his wisdom and in his righteousness, accordingly (?), he laid hold upon the skirt (wing) of his lord, the king of Assyria, the great [king. And the king of Assyria appointed him over the prefects and governors (?) of (the land of) Ja'di and his lord the king of Assyria made him to rejoice over the kings of Kbr. (prob. means kings of surrounding regions). . . . In the chariot (?) of his lord Tiglathpileser, the king of Assyria, [he went.] His (Tiglathpeleser's) camp was pitched from the East even unto the West. . . . The four quarters (of the earth he subdued) and the people of the East he brought to the West and the people of the West he brought to the East. And my father [fought for him and he added to his territory] his lord, Tiglathpileser, king of Assyria, cities from the territory of Gurgum. . . . And my father, Panammu, the son of Bar-Sur. . . . And my father, Panammu, also died in the service (?) of his lord Tiglathpileser, the king of Assyria. in the camp . . . and all the camp of his lord, the king of Assyria, wept for him. And his lord, the king of Assyria, took . . . and he set up for him coverings (?) for a month and (afterwards) he brought (the body) of my father from Damascus to its place. All his house mourned for him and, I, (=as for me) Bar-Rekub, son of Panammu, because of the righteousness of my father and because of my own righteousness, he caused me to sit, my lord, the king of Assyria (upon the throne) of my father Panammu, the son of Bar-Sur. And I have set up this statue (as a memorial) to my father, Panammu, the son of Bar-Sur. . . . And I gave command with respect to presents and offerings specified (?) . . . and the presents were brought before the grave of my father, Panammu. . . . And this memorial is before Hadad and El and Rekub-El, the lord of the house, and Shemesh and all the gods of Ja'di . . . [it is] in the presence of the gods and in the presence of men."-Acad., Apr. 22.

THE PANTHEON OF THE PANAMMU INSCRIPTIONS.—M. Joseph Halévy has issued the first number of his Revue Sémitique, d'Épigraphie et d'Histoire ancienne (Paris, Leroux), which contains continuations of his 'Recherches Bibliques,' the second part of his article on the Tel el-Amarna tablets, notes on some pretended Hittite inscriptions, and some cuneiform and Ethiopic texts. The most interesting essay, in our opinion, is that on the two Semitic inscriptions discovered at Sindjirli (North Syria), the originals of which are in the museum of Berlin, and of which photographic facsimiles are now published in

the Mittheilungen, fasc. ix. The decipherment of these inscriptions is not particularly satisfactory as yet. The inscription where the king of Yadi, Panammu son of Krl, is mentioned, is of the eighth century, and the other, where Panummu son of Bar-Tsur is mentioned, is of the seventh century; the latter was contemporary with Tiglath-Pileser III., whose name occurs in the inscription with the same orthography as in the Bible. The gods mentioned in the inscriptions are the following: Hadad, El, Rkb-el, Reshef, and Shemesh. The language of these inscriptions is either Hebrew tinged with Aramaic, or, according to another opinion, Aramaic tinged with Hebrew. Which Semitic tribe was dwelling in this northern country between the Orontes and the region of Marash, called in Assyrian Samal (שמאל), "north," is at present doubtful. M. Halévy thinks they were Hittites, or the Hatti of the Assyrian inscriptions, who consequently spoke a Semitic dialect, a fact in accordance with the Bible (Genesis xv.). Thus, according to M. Halévy, the Hittite problem is now solved. The inscriptions found in Hamath and Aleppo, M. Halévy says, were written by invaders coming from Anatolia. As to the Pantheon of the Panammu inscriptions. El is known. Rkb-El seems to us connected with the Biblical Rechab, the founder of the Rechabites (Jeremiah xxxv. 2), and not with Rechub and Cherub, as Prof. Sachau suggests. Reshef has been recognized as a deity by M. Clermont-Ganneau in connexion with Job v. 7. See also 1 Chron. vii. 25. Shemesh, "sun," is known.—Athen., Meh. 18.

PALESTINE.

THE KARNAK LIST AND THE BIBLE.—A paper was read at the meeting of the Victoria Institute on May 1, from Prof. Maspero, embodying the results of his investigations during the past ten years as regards the places in Southern Palestine claimed, according to the Karnak records, to have been captured by the Egyptians in the campaign under Sheshonq (Shishak) against Rehoboam. Prof. Maspero pointed out the great help that the recent survey of Palestine had been in determining the localities referred to, and specially referred to the fact that the Egyptian documents, rigorously transcribed in Hebrew characters, gave almost everywhere the regular Hebrew forms in the Bible, without change or correction.—Acad., May 1.

RAISED MAP OF PALESTINE.—After five years' work, Mr. George Armstrong, Assistant Secretary to the Palestine Exploration Fund, has made a raised map of Palestine on a scale sufficiently large to show the relative proportions of the physical features of the country. It is on a scale of ‡ in. to the mile, and measures 7 ft. 6 in. by 4 ft. It embraces the whole country from Baalbek to Kadesh Barnea,

showing on the east of Jordan almost all that is known; and it is constructed entirely on the basis of the surveys of the Fund as embodied in the recently-issued map. The seas, lakes, marshes, and perennial streams are in blue, the watercourses on the plains and main roads are marked by a grooved line, the Old and New Testament sites in red, and the plains and hills are in white.—Pal. Expl. Fund, Oct., 1893.

PALESTINE UNDER THE CRUSADERS.—Herr Röhricht, well known as a student of mediæval Palestine, has published a valuable compilation of the contemporary documents, treating of its history from 1099–1292 A. D., including the letters of Popes, Kings, Emperors, Sultans, and others, with grants to the Church, the Military Orders, and the Italian traders, and with ecclesiastical correspondence from a variety of sources, under the title Regesta Regni Hierosolymitani. He has added excellent indexes and a glossary of the peculiar Latin of the time, full of Norman and Arabic words. The documents published number 1519.—Pal. Expl. Fund, July, 1893.

PROBABLE EXCAVATIONS.—The excavations carried on at Tell el-Hesy (Lachish)—first by Prof. Flinders Petrie, and afterwards by Mr. E. J. Bliss—are now closed; but the committee of the Palestine Exploration hope that they may soon obtain a firman for excavating elsewhere. Meanwhile, important researches are being conducted along the line of railway now in progress between Haifa and Damascus, which passes through the heart of the Northern kingdom of Israel. Mr. Bliss's final report upon his work at Tell el-Hesy will be published by Messrs. A. P. Watt & Son early in the new year, under the title of A Mound of Many Cities, with upwards of 200 illustrations.—Academy, Oct. 21.

PHILISTINE MICE AND OTHER ANTIQUITIES.—Herr Schick calls attention in the Quarterly Statement of the Pal. Expl. Fund (Oct., 1893,) to some metal figures of mice in the collection of antiquities of Baron Ustinoff at Jaffa. He says: "The baron has about half-a-dozen creatures made from white-looking metal, not silver, but harder than pewter or zinc. They were found by the peasants in the land of the Philistines and represent mice. When I saw them, at once I Samuel, vi. 4, 5, came into my mind. These figures are not solid, but half relief, and pressed out from a flat piece of metal. They are without a tail, but have a hole into which a string could be fixed by which to hang up the figure as an amulet. The five golden mice which the Philistines put as an atonement with the Ark of the Covenant when sending it back, as related in I Samuel, vi. 4, 11, were perhaps such amulets." This discovery is most interesting.

In the same collection were other interesting pieces. (1) A half-dozen curious figures made of hollow copper, representing a kind of serpent with a dragon's hand, with two long ears, and in its sharp, beak-shaped mouth a falling ball. It is cast, not beaten, work, but no two were cast in one form or model. (2) A block of reddish hard stone, on which is carved the figure of a woman with two wings in a recumbent position. The hands and feet, instead of ending in fingers and toes, end with fish-tails. Close to the feet, is the word EYTYXHC, and on the side: Εὐτύχης χρηστὲ καὶ ἄλυπε, χαῦρε · Ζήσας ἔτη. . . .

ASCALON.—A CRUSADING ARCHITECT.—Baron Ustinoff has added to his collection of antiquities at Jaffa a slab with a Latin inscription brought from Ascalon. It begins with † MAGISTER FILIPVS, the name of the architect: then follows, on the second line, his designation as de camera Regis showing that he was official architect to ‡ a king who is supposed by Baron Ustinoff to be Richard Cœur de Lion. On the third line is fecit hoc opus, while the fourth gives the part of the fortifications that he erected, describing them as from a point unknown (the inscription is broken here) up to the gate where the inscription was evidently placed. The inscription is broken away in the lower left-hand corner, and the reading given is in part faulty, so that the above is all I could decipher.—A. L. F., Jr., from Pal. Expl. Fund, Oct., 1893.

GAZA.—Inscriptions.—M. Clermont-Ganneau, in the meetings of the Acad. des Inscr. for Apr. 23 and 28, 1893, read a communication on the inscriptions of Gaza, and on the determination of the calendar and era of this city. The inscriptions are thirty in number, Christian epitaphs, exactly dated. The years are indicated according to the era of Gaza, which is proved to have begun on Oct. 28 of the year 61 B. C. In some cases the era of Ascalon is used, which would appear to have begun Oct. 28 of the year 105 B. c. He then described two churches built at Gaza by the crusaders. The largest has three aisles, one of which is an elevated nave, with two orders of piers. The façade with its gable, its two engaged buttresses, its central rose window, its finely sculptured portal and well preserved porch, recalls French churches of the XI and XII centuries. One of the ancient columns used in the interior bears in relief a representation of the seven-branched candlestick with a dedication in Greek and Hebrew to Ananias, son of Jacob. This column is apparently from some Byzantine synagogue, brought by sea, perhaps from Alexandria or Cæsarea.—Rev. Arch., July-Aug., 1893, 107-108.

EGYPTIAN VASE.—An elaborate vase has been found near Gaza which is commented on by P. C. Page Renouf in the Pal. Expl. Fund's Quar-

terly for July, 1892. The inscription on it contains three royal Egyptian cartouches. Two contain the throne name of King Amenhotep III, of the 18th Dynasty, i. e. Nebmaût-Rû. Facing these rings is that of his queen, Tia. Under the three names are the words, "giving life forever."

JAFFA.—TABITHA GROUND.—In the garden east of the city is a piece of high ground called Ard Tabitha, which was a large burial-ground and contained rock-cut tombs, many of which have been destroyed in making modern "improvements." On the highest part of it, belonging to the Russian Archimandrite, Mr. Schick made investigations which he reports in the Pal. Expl. Fund Report for October. The rockcut tombs are cut in a rock not so hard as that at Jerusalem, and in a somewhat different style. Several have been cleared by the Archimandrite, and the most important one converted into a chapel, now called the "tomb of Tabitha." Its kokim or loculi enter the rock about 8 ft., are 21 ft. wide and 3 to 5 ft. high at the entrance, but further in become lower and more and more narrow: they are closed with masonry. From the first chamber a narrow passage leads to another with a rock support in the middle, through which is an entrance to other tombs. On a number of epitaph stones there were inscriptions, some of which were published by Euting in the Sitzungsberichte of the Berlin Akad. d. Wissen, for 1885 (xxxx). Mr. Schick publishes fac-similes of five inscribed Greek inscriptions, without, however, attempting to read or explain them. Inscr. No. 1 reads: Θήκη Ζ[ωίλ | ου υίοῦ Κ[λα | Πτολεμ[αί | ου έντολι | . . εἰς αὐ[τόν, and marks the tomb of Zoëlos, son of Claudius Ptolemaeus." No. 2 is: Εἰσιδότη ᾿Αριστίω | νος, Χρηστή, Χαῖρε: "Isidotê, daughter of Aristion." No. 4 reads: Τόπος Εἰακω(β) Καπ(π)άδοκος καὶ Αχολίας συνβίου αὐτοῦ ·καὶ 'Αστερίου; "burying-place of Jacob of Cappadocia and of his wife, Acholia, also of Asterios." No. 5 has merely the name of Judas, son of Jannaeus. The objects found belong to the Greeco-Roman period.

JERUSALEM.—The Second Wall.—Herr Schick contributes to the July Quarterly Statement of the Palestine Expl. Fund (1893) a short paper in which he states his opinion with reference to the second wall of the city, accompanying it with a plan. He says: "The line I give of the second wall is 2,600 ft. long, with 2 end spaces and 14 towers, and the spaces between them give 15 distances, or parts, and dividing the length of the wall by this number gives 173½ ft. for each." Josephus gives this wall 14 towers, and the average distance between the towers of the present wall is 173 ft., which agrees with Schick's line. The course he gives as follows: The starting-point at the present castle was found with a long piece of the wall going as far as the road

running eastward, 182 ft. N. of the corner of the Castle wall in the ditch; there it bends N. E. N. (and the zigzag line of this street is the result of the former wall with its towers) to the corner of the street, where it bends eastward, as did the wall. It crosses Christian street (some remains here) and goes straight to the Muristan, where traces have been found. There it bent northward and had in it a castle (remains exist), which was defended by the Jew "Castor" against the Romans, and the ditch west of which is traceable. At the N. end (remains exist) the wall bent eastward, and stood for a few hundred feet on a high rock-scarp, a good deal of which can be seen. This scarp formed an angle going southward for about 300 ft., forming a high rock platform about 350 feet square. Either from the N. E. or S. E. corner the wall went eastward down into the valley, across it, and onward to Antonia, either along the crooked road or more to the south. There were two walls, one made by Hezekiah, one by Manas-A series of proofs for this line are appended.

PHŒNICIAN INSCRIPTIONS ON VASE-HANDLES.—On some clay vase-handles discovered at the foot of the Haram wall are Phœnician inscriptions. which are discussed by Prof. Sayce in the Quarterly Statement for July, 1893, of the Pal. Expl. Fund. They are: (1), [L-M-L-K] SH-T; (2), [L]-M-[L]-K SH-K-H, and (3), L-M-L-K Z-PH. The first word, in all cases, signifies "belonging to the king", or "belonging to Melech": the preposition 's should be followed by the name of the owner. Now Z-PH and SH-K-H represent the names of two localities in Judah, Ziph (2 Chron. XI. 8) and Socho (Josh. XI. 35). Melech (or Moloch) is the well-known title of a deity who was worshipped in Canaan as well as beyond the Jordan, and in Melech-Ziph and Melech-Shochoh Prof. Sayce proposes to see the local names of a god, in the same way as the god of Tyre was called Melech-Qiryath=Melkarth. The third name is Melech-Sheth, and here Prof. Sayce sees the name of the Egyptian god Seth, the god of the Semites in Egypt, who was adopted as a deity by the Canaanites and worshipped with an ass's head. As an analogous example to this compound name of a divinity, the example of Hadad-Rimmon is adduced.

Church of the Convent of the Cross.—The plaster on the walls of this church, upon which were some ancient frescoes, has been removed. Among the figures were those of Socrates and Plato, represented as having prepared the way for Christianity, as is often to be seen on the walls of the porches of Byzantine churches.—Pal. Expl. Fund, July, 1802

CH. OF S. MARTIN.—Among the buildings and churches existing in the crusading time at Jerusalem, whose site had not been as yet iden-

tified, is S. Martin's church. It was situated in the modern Jewish quarter, east of the street, near the Mosque El-Omari. Recently Dr. Hanauer found in one of the Jewish houses in this region some columns that appeared to belong to this church. They were four in number, supporting cross-vaults. There were probably three aisles and three apses, and Mr. Schick believes that the central compartment was covered by a dome with a diameter of 24 ft., through which the light is supposed to have come, as there are no windows in the walls.—Pal. Expl. Fund, Oct., 1893.

In the same review Dr. Hanauer has a note on The Churches of St. Martin and St. John the Evangelist. His notes are historical. shows that after the expulsion of the Crusaders in 1187, the church of S. Martin was allowed to fall into ruin, and was then bought by the celebrated Nachmanides and turned into a synagogue, A. D. 1227. Writing to his son, then living in Spain, Nachmanides says: "We found a very handsome but destroyed building, with marble columns and a beautiful cupola, and started a collection in order to restore this edifice as a synagogue; after which we began at once to build up the same." This building with columns and cupola still existed in 1852, and was known as Al Maraga, but had been forcibly taken from the Jews about the year 1566. It is evident from the drawing that at some time the vaulting collapsed and was restored, and an Arabic book, Unus el Jehil by Mejir ed Din, gives an account of the circumstances connected with the breakdown and the restoration. In 1473 the only access to a mosque in this quarter, abutting on the synagogue, was by a long narrow lane, and the Mohammedans took the pretext of the falling in of a house to attempt to open up a new access. Although official legislation favored the Jews, the local Mohammedans demolished the adjoining synagogue against the orders of the Sultan, who had the offenders punished, and sent a commission to rebuild the synagogue.

S. Giles and S. John the Evangelist.—In the above-quoted paper by Dr. Hanauer, two identifications of mediæval churches are proposed. Just beyond the Mohammedan College called *Medresseh et-Tazieh*, is an archway spanning the Tarek Bab-es-Silsileh, and on its northern side rests partly on massive fragments of columns and partly on a pier of masonry, which hides the facade of a crusading building. Through a broad doorway in this pier one gains access to a large and beautifully-vaulted chamber, the roof of which is borne up by two columns in situ, with mediæval capitals, from the sides of which ribs run up to the roof. The roof (vault?) evidently stretches over these walls northward and eastward, how far we cannot tell. The old doorway is

undoubtedly Crusaders' work, as is clear from the diagonal dressing. He thinks this vault was once the western end of the church of S. Giles. Going eastward, on the right, in a house erected through a long courtyard, some columns were discovered several years ago by Dr. Chaplin, who believed them to belong to S. Giles. These have now been removed with the exception of a base. Between the two sections of the church is a Crusaders' window, probably also belonging to it.

The site of the church of S. John the Evangelist is not known, but it is conjectured, independently of any remains, to have been at the corner of the Via Dolorosa, S. of the Armenian Catholic monastery, No. 27 Ordnance Survey. Now Dr. Hanauer calls attention to the fact that just at this point, opposite the Austrian Hospice, there is a remarkable mediæval house, two lower vaults of which are still entire, 30 ft. long and 15 ft. wide, side by side, and forming a platform, on the top or roof of which are the remains of a small church of which the chancel-arch and part of the side walls still remain. A Mihrab or Moslem prayer-niche built in diagonally under the chancel-arch, between two arched recesses that look like miniature apses, but are perhaps only walled-up windows, show that when the Mohammedans captured the city they turned the church into a mosque. The remains are called El Jami el Ahmar.—Pal. Expl. Fund, October, 1893.

PHŒNICIA.

PHŒNICIAN EPIGRAPHY.—In Studii d' Epigrafia Fenicia (extract from Atti dell' Accademia di Scienze, Lettere e Belle Arti di Palermo) Sig. Astorre Pellegrini publishes a series of valuable notes upon Phœnician epigraphy, and upon the Phœnician inscriptions published by Renan in the "Corpus Inscriptionum Semiticarum." In the first part of the work he discusses the gods' names mentioned in these inscriptions, and describes the system and ideas of the Phœnicians in erecting stelæ, votive altars, &c.; the form and contents of the inscriptions are also dwelt upon, and the abundant references to classical writers and other authorities prove that he has gone to work in a careful and systematic manner. The second part consists chiefly of grammatical discussions upon difficult Phœnician names and words, and, together with Dr. Bloch's "Phoenicisches Glossar," will form a useful supplement to Renan's magnum opus.—Athen., Sept. 16.

EUROPE.*

ITALY.

VETULONIA.—Recent Discoveries since 1886.—Cav. Falchi has made, in the Notizie degli Scavi (1892, pp. 381-405, and 1893, pp. 143-161,) a

^{*} Lack of space has made it necessary to defer the publication of the rest of the News until the next issue,

report on the discoveries made at Vetulonia since 1886, and especially during 1891. The previous excavations have been fully noticed in the Journal (Vol. IV, pp. 175–180 and passim). Sig. Falchi himself has treated very fully of the later work in his Vetulonia e la sua Necropoli antichissima, accompanied by XIX plates. Already in 1888 we spoke of the discoveries at Vetulonia as the most important for early Italian archæology that had been made during the past fifty years, and now they certainly throw all others into the shade. It will be necessary to devote more than the customary space to a review of the work accomplished here.

In the same way as the discovery of the primitive sepolcreto and of the presence of foreign deposits among the Italic well-tombs of Poggio alla Guardia led to the finding of the stone circles, so the exploration of these circles has been the means of a still more important find.

The discoveries made since 1886 are due to a fact noticed from the beginning of the excavations in the primitive cemetery of the Poggio alla Guardia (1884-6). It was that between and as if sandwiched between the tombs with simple cinerary urns, always poor, all for the rite of cremation and lacking in any imported objects, there appeared, without any external sign of their existence, deposits which not only did not include any objects special to the Italic well-tombs, but consisted always, on the contrary, of imported objects. These deposits were not properly tombs, as they contained no human remains either by cremation or inhumation: neither could they be technically called tombs, because they did not have any open space nor any accompanying works of pottery nor were they furnished with any means of protection above. Still they must have been funeral deposits, because surrounded by the dirt of funeral pyres and placed in excavated holes, and because, strangely enough, they contained the teeth only of the defunct, the corona alone, surrounded by the funerary deposit. This deposit consisted invariably of amber, colored glass, scarabs, necklaces of bronze circles, bronze fibulæ a mignatta, small tubes with pendants, double-headed cylinders, and sometimes objects in repoussé gold and silver finely worked. All such objects as these had appeared in other Etruscan necropoli, almost always in the welltombs with cinerary urns of the Villanuova type, but here at Vetulonia they are not accompanied by a single object certainly Italic, and are grouped in these holes with order and symmetry around sets of teeth, often without any terracotta vase, sometimes on top of and about a small vase of red clay, always broken.

These deposits, very rare among the Italic well-tombs, less so in the spaces not occupied by them, appeared a little further on bounded by

an interrupted circle of red and formless sandstone on the edge of the cemetery of the *Poggio alla Guardia*, and these, although anciently pillaged, furnished a quantity of amber, glass, fibulæ and bronze tubes similar to those found in the deposits without circles within the cemetery: in one of them was a statuette of Bes which occurs in another circle.

Stone Circles.—From this moment the stone circles became the main object of research during the springs of 1887, 1888, 1889 and 1890. It was found that they went on in ever-increasing size and sumptuousness, no longer in interrupted segments, nor made of formless sandstone blocks, but continuous and formed of white slabs of calcareous stone; and that they extended down the whole eastern declivity of the poggio of Vetulonia in a very extensive zone, preserving the same style and the same customs of the foreign deposits.

Of no less importance was a second fact. Having ascertained the existence in the Poggio alla Guardia of sepulchral deposits in complete antagonism with the contents of the well-tombs, he then became aware of the fact that even in the midst of this cemetery, surrounded by these very well-tombs, there were on the summit and a little eastward, certain rude stones arranged in circle, very much resembling those of the stone circles outside the cemetery. On examination, they were found to form similar circles of exactly the same dimensions, but instead of containing, like the others, a central cavity, they were full of Italic well-tombs, as many as 17 per circle, with typical cinerary urns almost always a capanna (house-shaped), some of which contained amber and glass similar to those in the foreign deposits but mingled in this case, as in nearly all the archaic necropoli of Etruria, with razors, fibulæ a scudetto (shield-shaped), hair-pins and crude fictiles, objects that never appear at Vetulonia in the deposits with a central cavity. Cav. Falchi regarded this exchange of customs and objects between the circles of crude stones with central cavity and the circles containing Italic well-tombs, as indicating that more intimate relations had sprung up between the two opposite peoples, and that some of the better class of the well-tomb people had adopted the use of the circle. However, outside this cemetery of the Poggio alla Guardia no such well-tomb circles have been found, but only circles of white slabs of Sassovivo stone, a continuation of the foreign deposits. These more perfect circles begin to appear on the immediate border of the primitive necropolis (P. alla G.) Beginning with a diameter of six metres, they go on in increasing size as they extend down the east slope until they reach a diameter of 34 metres, and then return to small proportions and to the use of rude stones on the edge of the

slope and in the plain. They are often placed on uneven and sometimes on low ground. Rarely is there any superficial sign of their existence. The work in each circle consists in one or more cavities made in the soil without construction of any sort, without covering or protection, filled first with stones, then with earth. In the circles adjacent to the primitive necropolis there is but one cavity and it is in the centre, but in those further away, either the central hole is almost void of funerary objects, or there are several holes, in which case the contents increase in value the nearer the surface are the holes: hence it is possible that the richest deposits have been destroyed through the dispersal of their covering of earth. The objects are always carefully and symmetrically arranged in the holes, often in a stratum of pulverised wood, covered by the pyre-dirt or sometimes by cork-bark, but always stoned with the filling-stones, in order to so injure them as to prevent future use. As already remarked, there are no human remains: the only exceptions are a few of the later circles. The objects are of exactly the same categories as are found in the foreign deposits within the primitive necropolis: scarabs, amber, glass, bracelets, tubes, fibulæ of bronze and amber, a sanguisuga, objects in gold and silver, and double-headed cylinders. The difference is that the circles are far more sumptuous and contain many other objects: there is a greater abundance and variety of objects in amber and glass, a larger number of fibulæ, a greater profusion of gold and silver pieces, the constant presence of the furnishings for horses and chariots and many vases of bronze and crude terracotta. The ambers are of all shapes, and sometimes of human and lower animal forms: the scarabs of glass enamel preserve, in some cases, hieroglyphic inscriptions, and were evidently at times used as earrings; among the jewelry are heavy gold bracelets with broad bands, magnificently worked, fibulæ, necklaces and pins worked in filagree. The furnishings for horses and chariots show everything needful for bigas or quadrigas, bits, head-pieces, blinders, straps, stirrups, wheel-tires, &c. Of works in bronze plate there are large smooth vases like cinerary urns, helmets, schinieri, striated vases, boilers, etc. Sometimes there are a goodly number of swords and lances of bronze and iron, but usually these deposits contain female ornaments. Certain rude and heavy . handles of special shape and certain peculiar objects in the form of candelabra common to all the circles, are found for the first time at Vetulonia. The fictile vases, almost all of them striated and of black ware (bucchero), with conical feet and if large then crude and heavy, here show new forms but seldom decorated with running animals in low relief, never painted with human figures.

Another peculiarity, but one which is not constant nor confined to the stone circles, is the presence of certain monoliths of local granite or of Sassoforte stone, also unknown throughout the rest of Etruscan necropoli. They are almost hemispherical, only slightly pointed, improperly called cones, and are almost always of great size and beautifully worked. They weigh up to four or five ton, and are sometimes single, sometimes in groups of two or even four per circle, being placed on edge in the centre of the circle on the filling-in stones, half-way between the surface and the bottom of the cavity. When large they are practically immovable by hand or lever, as they offer no hold. It is a peculiar fact that in all the circles where they are found the central cavity, though inviolate, is almost always without interesting contents.

The ethnographic and chronological deductions to be drawn from a study of these circles, and a comparison with the necropolis of poor Italic well-tombs are given by Cav. Falchi in the last two chapters of his book *Vetulonia e la sua Necropoli antichissima*. One point to which he calls especial attention is that the increasing profusion of works of gold and silver of developed art does not indicate any increase of productive culture during the period of the stone circles but only an increase of luxury and wealth.

The circles thus far explored—at the time of the report—numbered thirty-four, only a few of which were intact. The existence of many others is ascertained, and will be added to by further investigations. The first circle described is called *circolo dei monili*, and its contents are rich and varied.

Two hypogeums.—The hypogeum found in the depths of the Pietrera tumulus is important not only for its architectural features, which connect it with the constructions of the Orient, and because it belongs to the necropolis of an Etruscan city reputed to be most ancient, but also because it raises a multitude of queries and problems. There is the question of the period of each of the constructions, of the races that built them, of the time that intervenes between them, of the probability that they were used contemporaneously, and to which of the two structures was originally related the rich tomb with the gold ornaments found in a part of the tumulus.

Now it should be noticed that the lowest and therefore the most ancient of the structures is formed entirely of squared blocks of Sasso-forte stone, without the admixture of a single slab of the Sassovivo stone which is exclusively employed in the upper structure. The Sassoforte granite is very easily worked when it is fresh from the quarry, but after exposure and in dry surroundings it becomes ex-

tremely hard: it comes from the Sassoforte Mountains, 30 kil. from Vetulonia, and is used on this site extensively enough to make a vil-The earliest construction is covered by the spur and shows no remnant of the covering which must have existed to protect the hypogeum, but it is interesting that an examination of the spur shows that among its sandstone slabs there are some well-squared wedge-shaped blocks of Sassoforte which evidently once belonged to a hemispherical vault. Then an examination of the chamber itself shows that the walls are cracked and bulged, the piers of the doors broken, the interior filled with fallen wedge-shaped blocks of granite. The conclusion is that this structure in granite blocks was the earliest and only one existing at a very early period in the tumulus of Pietrera; that its dome fell in under the enormous weight of the superincumbent earth; that its walls and the spur constructed within it were made to serve as the foundations for another hypogeum built above it with slabs of Sassovivo.

As for the age of the two hypogeums, it is to be noted that among the few terracotta fragments found there is not one that does not belong to a very remote period: that those from the upper chamber, except for a few decorated and colored with foliated designs, are exactly like those found in all stone circles: that the jewelry found in the tomb for inhumation, which is in this same tumulus, is of the same technique and style as that of the stone circles. It may be concluded, therefore, that the earliest construction belongs to a remote age; that the author of both this and the upper hypogeum were the same people, descendants of those whose custom it was in the beginning to place the teeth of the deceased among the most precious objects, all imported, in a hole excavated in the midst of the Italic well-tombs of the Poggio alla Guardia; which people added in the course of time to the objects in glass, amber and gold, all the harnessings for chariots and horses, and surrounded the sepulchral area with a stone circle; that this people used first cremation and then inhumation as its burial rites and employed the Etruscan alphabet.

The constructors of both hypogeums were equally expert in the art of building, as is shown by the regularity and exactness of the construction, the perfection obtained in the central pyramid and the structure of the vault, made of material difficult to shape and put together without cement. On the other hand, they are novices in their knowledge of local products, as is shown by the friability of the material used in the more ancient structure, which was the cause of the giving way of the vault notwithstanding the central pyramid. Hence it may be said that the earliest hypogeum was the first made

in the necropolis of Vetulonia, and perhaps the only one made of Sassoforte stone that is to be found there. Nor is it to be thought that the first structure lasted any great length of time before it fell in. Still, that it was used as a sepulchral chamber is shown by the broken colonnettes of pietra fetida arranged at equal distances and symmetrically on two opposite sides of the chamber: they certainly served to sustain a fixed monument of which fragments remain, crushed by the falling vault. No treasures in precious metals were preserved here, but there certainly were funereal articles which must have been carefully removed and hidden away in another part of the mound, although they have not yet been discovered. In order to determine to which of the two hypogeums the tomb with the gold ornaments belonged, it is necessary to note that the mound was originally made to cover the first hypogeum, which was about five metres high; and that when the second hypogeum, rising to a height of some ten metres, was erected on its ruins, the tumulus had to be not only raised, but enlarged in its circumference to such an extent as to change the tracing of the road, now called dei Sepolcri or del Piano, which encircled one of its sides, and obliging it to make a curve, which it did not originally have, as can be proved by a bit of the earlier road that remained buried under the edge of the enlarged mound. Neither of these hypogeums appears to have been, strictly speaking, a tomb: they contained honorary monuments but no funerary objects, which were doubtless concealed somewhere through the mound.

There are four tumuli of especially large size at Vetulonia, called Poggio della Pietrera, Poggio del Diavolino, Poggio Pepe and Poggio S. Andrea. The first of these, which is the one excavated, is of regular and almost hemispherical shape. It height is about 14 m.; its diameter 70 m.; its circumference 210 m. After penetrating into it for about 11 met., it was found that the tumulus was formed at its base entirely of stones cast in at random, with wide interstices and arranged in irregular heaps. At a depth of 2.30 met. a small cone of Sassoforte, like those of the stone circles, was found, and a little below it a squared stone of Sassoforte, beneath which was a heap of sandstones covering a rich group of sepulchral objects, laid on the bare earth and crushed by the great superincumbent weight. It lay in the northeast of the tumulus, 17 met. from the centre, at a depth of 3.50 met. From the fact that here also no trace of the burial was found, Falchi conjectures that the body was simply placed in a trench close by and then stoned, as was the constant habit in the stone circles and all the tombs except the Italic well-tombs at Poggio alla Guardia, which are excavated in hard ground and covered with a slab. The main objects

in this deposit were two gold bracelets, a gold necklace, some fragments of silver plate, some fractured amber, a few and badly preserved bronzes, etc. The bracelets are similar in form and technique to the many found in the stone circles, the main difference being in a gold plate attached at the ends of the broad band and the middle pro-

longation, and also in the form of the fastening.

Continuing the excavation, a gigantic structure was found in the centre, at a depth of 14 metres. This is the later of the two hypogeums already alluded to. Its vault had been partly demolished, at some time, in order to use its stones. The hypogeum consisted of a central chamber, of a long corridor and two side cells, one on each side of the corridor, near the entrance to the chamber. This chamber is a square, measuring 5 met., but it is covered by a hemispherical stone vault formed of horizontal encircling courses of slabs of Sassoforte. The vault is circular down to its very base, and the transition to the square of the supporting walls was managed by pendentives in the four angles, also of Sassovivo slabs, which pass gradually from the square to the circular arrangement until they form a perfect drum, upon which the vault rests. The material of the walls, of fine Sassovivo stone, is in large slabs with a mean thickness of 20 cent. The door, in the northwest wall, is quite well preserved. It is 2.10 met. high and 0.90 met. wide. Cav. Falchi speaks of its "architrave," which he describes as probably "semicircular" in form. The corridor is 14 met. long and 1.10 met. wide, flanked with walls of large slabs of Sassovivo 1.75 met. high. It originally extended to the west side of the tumulus, and was covered by large slabs resting on the side walls. The two side cells are placed opposite each other, and are perfectly symmetrical, measuring 2.40 met. in height, 1.90 met in width, and 3.10 met. in depth. They were covered with large slabs. The entire construction is 24 met. long.

The sepulchral chamber had evidently been more than once visited, at first by means of the corridor, then through the dome. The contents of the tomb, both in precious and common metals and in the coarse stone (Sassofetido and Sassofortino) were for this reason almost entirely obliterated. There must have been at least four statues of natural or more than natural size, almost or entirely nude, and apparently all female: they probably represented the figure of the deceased reclining on her back on a large slab. A number of fragments of these statues are published. Other fragmentary pieces of sculpture are: part of a capital having in relief an animal (lion) with open mouth and long curved tail; a slab with the rear part of a horse; a column (85 cent. high) with two affronted rampant lions in relief,

with eagle's heads, with open beaks and long upward curling tail. [These sculptures are of extreme interest, and remind both of Assyrian and of Phœnician monuments. We hope to notice these and the more recently-discovered sculptures in detail shortly.—Ed.]. Other remains of monuments have been found, principally of funeral benches, of which there must have been at least four. They consist of four rude granite or Sassafortino colonnettes, with a pilaster added half-

way up, to aid in supporting a large slab. Nine years before, Cav. Falchi had penetrated into a chamber different from this one, in this mound, and at a lower level. He therefore dug below what appeared the natural level of the tumulus. He found that anciently there was here an open space which, with the exception of a beautifully finished pyramid of granite in the centre, had been filled in with horizontal courses of slabs. Thus at a depth of 11 met. he found himself at the bottom of a shell-shaped well of granite slabs. The solution of the enigma was that, beneath the upper chamber with walls of Sassovivo stone, there had originally existed another more beautiful chamber, whose walls had afterwards been lined irregularly by heavy slabs to sustain the weight of the second hypogeum when it was built. We have explained on pp. 624-5 how this first chamber was built and how it was probably destroyed. As for its construction and arrangement, its walls consist of squared Sassoforte blocks, so perfeetly joined that their junction is hardly perceptible. These walls are 2.90 met. high, and are immediately beneath those of the upper chamber. The central pyramid consists of eleven square slabs of granite, which, starting at a base of 0.91 met., gradually diminish in size until they reach a section of 75 cent., at the total height of 2.90 met. The construction could not be more perfect.

More recent discoveries.—Dr. Halbherr adds the following more re-

"I must also mention that a still richer and more wonderful discovery than any of his preceding ones has now been made by Cav. Falchi in the tumulus called of the *Pietrera*, the burial mound which excited so much interest last year. About one-half of the tumulus has been so far explored; so that all the objects found cannot be as yet safely dated by means of their respective positions. All, however, that have been disinterred must be referred to the vii century B. c., that is to say, were at least coeval with the first formation of the tumulus itself. None of these objects has been found in the stone sepulchral chambers which form the real tomb, but in the earth brought to cover the tomb. The chief amongst these objects are a heap of buccheri, near the spot where the year before were discovered

the well-known necklace and bracelets of fringed gold ribbon; another collection of buccheri less than a yard distant; a hoard of precious objects; and a head of pietra fetida of natural size and in archaic style, forming part of a series of sculptures in this stone which are considered by Prof. Milani to be a real revelation in the history of Etruscan art. The buccheri all belong to the same type as those obtained in 1886 from the so-called tomba del Duce. They are of two kinds-some smooth and some with the wave ornament-and they consist for the most part of cups. One is decorated with zones of animals in embossed or stamped work, and many are covered with gold leaf of the usual stamped ornamentation, but of more difficult interpretation. Amongst the precious objects recovered must be numbered the fragments of two gold bracelets of exquisite workmanship, with pendent decorations representing human heads and figures in embossed gold leaf. This pair of bracelets, of the usual fringed gold band, exceeds all others obtained from the same necropolis in its marvellous delicacy, and in the peculiarity of its embossed characteristics. Next came a necklace of seventy hollow beads or berries of gold leaf, ribbed, with attached about thirty gold pendants in the form of small female busts adorned with breastplates, like those of the treasures of Palestrina and Caere. There are also fragments of a silver box in embossed work adorned with griffins and other fantastic animals (the two rampant silver lions found near may have belonged to the lid), resembling in style and form those of the coffer found in the tomba del Duce; and fragments of one or two armillae, silver gilt, of a new type, with embossed human figures and flowers. All that I have described, with the rest of the treasure-trove, will be added to the other objects already in the Museum of Florence, while a full descriptive report of the whole will be published later on by Cav. Falchi in the Notizie dei Lincei at Rome."-Athen., Aug. 5.

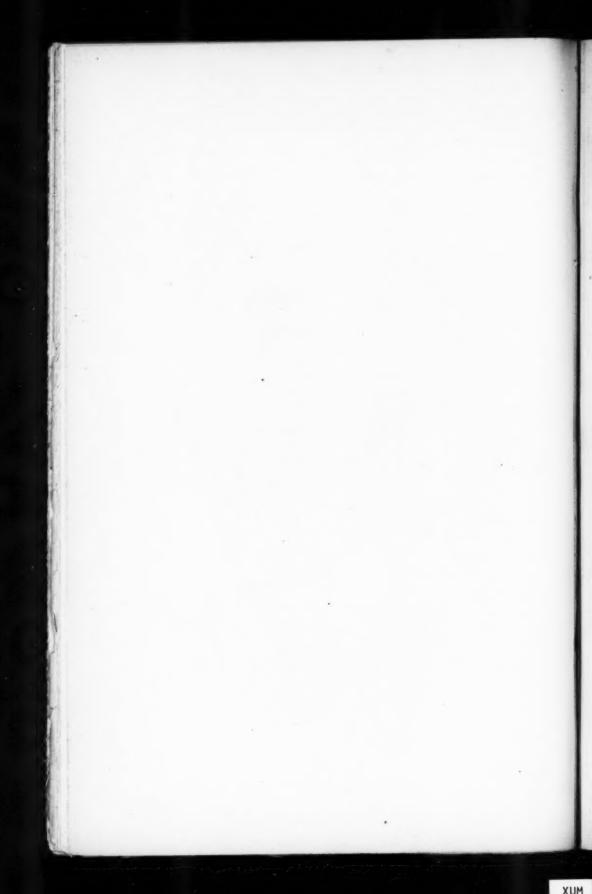
The existence of two Vetulonias.—Prof. Halbherr writes to the Athenæum of Aug. 5: "In my last letter I announced that Prof. Milani was engaged in determining the real site of Vetulonia, with a view to the settlement of a long debated question, and I am now able to give the result of his researches. For several years past Tuscan archæologists have been divided in opinion as to the site of the ancient city of Vetulonia, some placing it on the hill of Colonna di Buriano, in the commune of Castiglione della Pescaia, and others on the Poggio Castiglione, five miles distant from Massa Marittima, and as many from the Gulf of Follonica. This difference of opinion has been the occasion of a long controversy between Cavaliere Isidoro Falchi, who was for Colonna, and Prof. Dotto de' Dauli, who was for

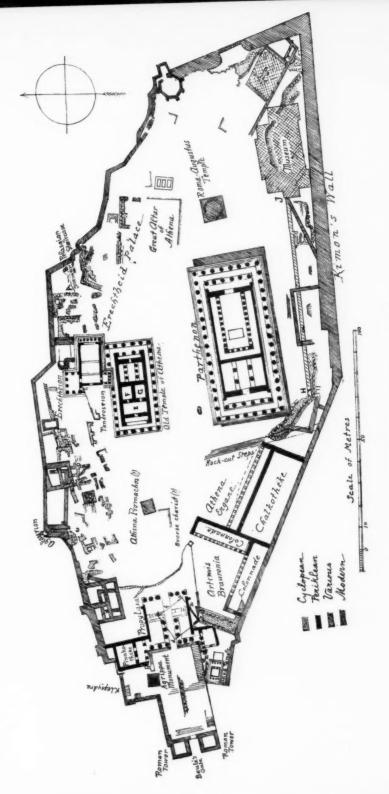
Castiglione. Strange to say, our latest discoveries prove the existence of two Vetulonias, one of more ancient foundation than the other, so that both sides must, in a certain manner, be deemed to be in the right. In fact, while the vast necropolis which lies round about the hill of Colonna, formed, as it is, almost exclusively of tombs of the archaic period, proves that the city to which it belonged-discovered during the excavations made by the Italian Government a few years ago —is undoubtedly the primitive settlement, dating from the tenth down to the sixth century B. c., the fresh works undertaken at Poggio Castiglione, under the direction of Prof. Milani, which took for point of departure the fragments of walling previously observed by Prof. Dotto de' Dauli, have brought to light another city, as also parts of a necropolis of a date posterior to the vi century, and continuing in use down to the II century B. C. After the identification of the circuit walls, it was an easy matter to find out the ancient roads of approach, and it was on following these roads that the remains of the new necropolis were soon revealed. The hill called Arnaino, to the east of Castiglione, and the other hills on the west looking towards the sea, and called Poggetti, are all literally covered with tombs a cerchio and tumuli marked out by stones of Alberese, exactly like those of the necropolis discovered by Cav. Falchi at Colonna. Two of these tumuli, measured at their base, were in diameter, the one 12.50 metres and the other 19. Another tumulus is of enormous dimensions, being about 100 metres in diameter. All these burials belong to the period between the second half of the vi and the v century B. C. The tombs belonging to the v and IV centuries B. C. were found cut out of the rock on the flanks of the hills in the valley called Riotto, half hidden by brushwood and thickets. It must be observed that tombs of a later period, formed of tiles and bricks, had already been found in the same neighborhood a few years ago by the peasants of the locality, so that now we have examples of burials extending from the latter portion of the VI down to the II century B. C. In a rifled tomb discovered in the beginning of Prof. Milani's researches a coin of Vetulonia was found placed with the body as Charon's obolus, and a coin of the city to which the deceased belonged was, when possible, used for this purpose. Other objects from the graves consist of fragments of vases of the III or II century B. C. The tomb itself lay amongst the ruins of an Etrurian building attributable to the v century B. c. Now the fact of the discovery of this coin, taken together with the documentary evidence, dating from the Middle Ages and going back to Roman times, collected by Prof. Dotto de' Dauli, indicates that the name of the newly-discovered city must have been Vetulonia.

"The reasons given for the nomenclature of this last city do not, however, invalidate the identification of the former city. Prof. Milani has therefore come to the conclusion that the ancient Vetulonians, towards the middle of the VI or the beginning of the V century B. C., when the burials at Colonna suddenly ceased, in order to defend their various commercial, mining and maritime interests, left their original home and formed a new settlement in a central position on the Gulf of Follonica, on the hill of Castiglione. The hill of Colonna, having on the other hand a good strategical position, was probably reoccupied about the III century B. C. by the Romans with a colonia, whence its modern name Colonna."

A. L. FROTHINGHAM, JR.

November, 1893.





PLAN OF THE AKROPOLIS, ATHENS.





AKROPOLIS. EXCAVATIONS NEAR THE NORTH WALL.



STRUGGLE OF HERAKLES WITH THE OLD MAN OF THE SEA.



ATHENA FROM THE PEISISTRATIC GABLE.

